

#### EXPLANATORY NOTE

*Attached are materials related to the actions of the Federal Reserve Bank of New York ("New York Fed") in connection with the Barclays-LIBOR matter. These include documents requested by Chairman Neugebauer of the U.S. House of Representatives, Committee on Financial Services, Subcommittee on Oversight and Investigations. Chairman Neugebauer requested all transcripts that relate to communications with Barclays regarding the setting of interbank offered rates from August 2007 to November 2009. Please note that the transcript of conversations between the New York Fed and Barclays was provided by Barclays pursuant to recent regulatory actions, and the New York Fed cannot attest to the accuracy of these records. The packet also includes additional materials that document our efforts in 2008 to highlight problems with LIBOR and press for reform. We will continue to review our records and actions and will provide updated information as warranted.*

An important and longstanding role of the New York Fed Markets Group is to monitor a wide range of markets for the purpose of understanding and reporting on market conditions and market functioning. Each day, analysts gather information on a nearly continuous basis by speaking with market participants and asking both general and specific questions about prevailing market conditions, the magnitude of movements in prices or the volume of activity, or any other issues in the markets. These analysts also review large amounts of market commentary they receive via individual and mass-distribution emails, and review a wide variety of data feeds.

Following the onset of the financial crisis in 2007, markets monitoring played a critical role by identifying the nature and location of rapidly mutating financial stress. Markets Group analysts engaged with market participants – including staff at Barclays – to better understand the nature of market stress. In the course of these exchanges, market participants reported dysfunction in the form of illiquidity and anomalous pricing across many different markets.

Among the information gathered through markets monitoring in the fall of 2007 and early 2008, were indications of problems with the accuracy of LIBOR reporting. LIBOR is a benchmark interest rate set in London by the British Bankers Association ("BBA") under the broad jurisdiction of the UK authorities, based on submissions by a panel of mostly non-US banks. The LIBOR panel banks self-report the rate at which they would be able to borrow funds in the interbank money market for various periods of time. As the interbank lending markets dried up these estimates became increasingly hypothetical.

Suggestions that some banks could be underreporting their LIBOR in order to avoid appearing weak were present in anecdotal reports and mass-distribution emails, including from Barclays, as well as in a December 2007 phone call with Barclays noting that reported "Libors" appeared unrealistically low.

As market strains intensified in early 2008, to better understand the nature and extent of the potential problems with LIBOR, analysts in the Markets Group gathered additional and more in-depth information. As part of this broad effort, on April 11, an analyst from the Markets Group queried a Barclays employee in detail as to the extent of problems with LIBOR reporting.

The Barclays employee explained that Barclays was underreporting its rate to avoid the stigma associated with being an outlier with respect to its LIBOR submissions, relative to other participating banks. The Barclays employee also stated that in his opinion other participating banks were also underreporting their LIBOR submissions. The Barclays employee did not state that his bank had been involved in manipulating the rate for its own trading advantage. Immediately following this call, the analyst notified senior management in the Markets Group that a contact at Barclays had stated that underreporting of LIBOR was prevalent in the market, and had occurred at Barclays.

That same day - April 11, 2008 - analysts in the Markets Group reported on the questions surrounding the accuracy of the BBA's LIBOR fixing rate in their regular weekly briefing note. The briefing note cited reports from contacts at LIBOR submitting banks that banks were underreporting borrowing rates to avoid signaling weakness. In accordance with standard practice for briefing notes produced by the Markets Group, this report was circulated to senior officials at the New York Fed, the Federal Reserve Board of Governors, other Federal Reserve Banks, and U.S. Department of Treasury. The briefing note is included in this packet.

Five days later, the first media report on problems with the LIBOR emerged. From this point onwards the notion that banks were underreporting LIBOR in order to avoid signaling weakness was widely discussed in the press and in market commentary.

In late April and into May 2008, New York Fed officials met to determine what steps might be taken to address the problems with LIBOR. The New York Fed also acted to brief other US agencies. On May 1 Tim Geithner, then President of the New York Fed, raised the subject at a meeting of the President's Working Group on Financial Markets ("PWG"), a body that comprised the heads of the principal regulatory agencies in the US, chaired by Treasury. On May 6 New York Fed staff briefed senior officials from the U.S Treasury in detail.

On May 20 the Markets Group sent a further report on problems with LIBOR to the broad set of senior officials who receive its regular analysis. The report is included in this packet. On June 5, New York Fed officials also briefed an interagency working group comprised of staff from the PWG. The presentations given to Treasury and to the PWG staff are included in this packet.

New York Fed officials also met with representatives from the British Bankers Association to express their concerns and establish in greater depth the flaws in the LIBOR-setting process. The New York Fed analysis culminated in a set of recommendations to reform LIBOR, which was finalized in late May. On June 1, 2008, Mr. Geithner emailed Mervyn King, the Governor of the Bank of England, a report, entitled "Recommendations for Enhancing the Credibility of LIBOR."

Among the recommendations were specific proposals to improve the integrity and transparency of the rate-setting process, including the suggestion that LIBOR submissions should be subject to internal and external audit of the accuracy of the reporting by banks. A copy of this email and the memorandum is included in this packet.

Shortly afterwards, Mr. King confirmed to Mr. Geithner that he had transmitted the New York Fed recommendations to the British Bankers Association soon afterwards. After putting forward recommendations for LIBOR reform to the UK authorities, the New York Fed continued to monitor for problems related to LIBOR.

As is clear from the work culminating in the report to Mr. King of the Bank of England, the New York Fed helped to identify problems related to LIBOR and press the relevant authorities in the UK to reform this London-based rate.

## Weekly Market Review, 04/12/2008

Jason Miu

### Major Market Developments

- Treasury yields rise as much as 13 basis points amid light trading volumes and no major economic data releases. After the market close, Alcoa, reports lower-than-expected earnings due to rising energy costs and weaker dollar. (Mon)
- The release of the FOMC meeting minutes garners discussion of the committee's focus on the continued downside risks to growth and their recognition that growth could contract in the first half of 2008; the 2- to 10-year Treasury yield curve steepens 8 basis points. (Tues)
- The ninth TAF auction stops out at 2.82 percent and a bid-to-cover ratio of 1.83. Market participants broadly suggest that the Federal Reserve's TAF results, along with the ECB's dollar auction, underscore the ongoing demand for dollars by both U.S. and European institutions. (Tues)
- Downside risks to economic growth and financial sector concerns weigh on investor sentiment; 2-year Treasury yields decline 10 basis points and the S&P 500 loses 0.8 percent. (Wed)
- As expected, the Bank of England (BoE) lowers its policy rate by 25 basis points and the European Central Bank (ECB) leaves its policy rate unchanged. (Thurs)
- The third Treasury Securities Lending Facility (TSLF) operation stops out at the minimum bid rate and is undersubscribed. Market participants interpret the results as a sign that repo market conditions are improving. (Thurs)
- General Electric reports lower-than-expected earnings and the University of Michigan consumer sentiment declines more than expected; equity indices fall more than 2.0 percent. (Fri)

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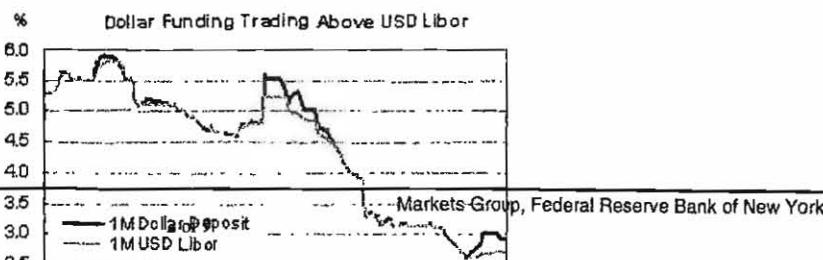
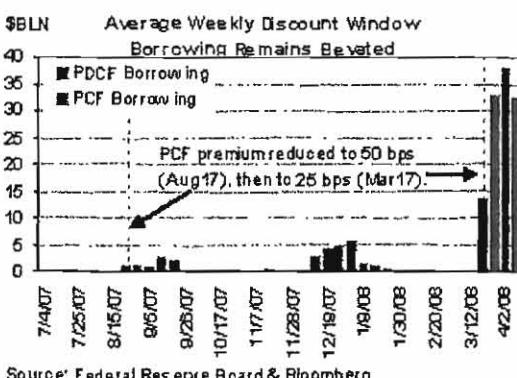
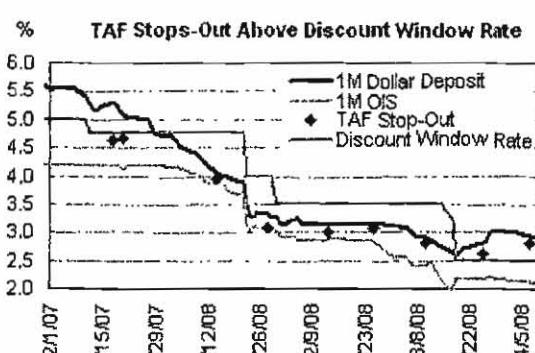
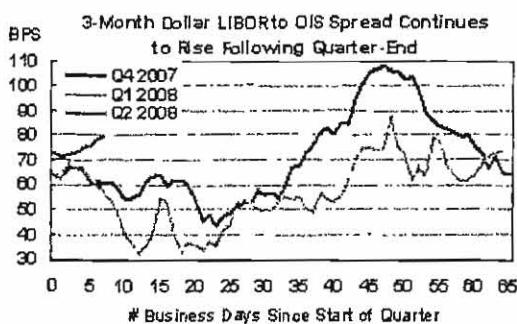
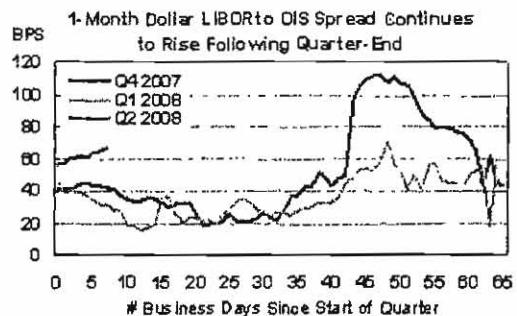
### Market Focus

- **Unsecured Interbank Funding Shows Signs of Further Deterioration...**
- **...While Secured Financing Markets Continued to Show Signs of Stabilization**

#### Unsecured Interbank Funding Shows Signs of Further Deterioration...

This week, the Federal Reserve conducted and released results for its ninth Term Auction Facility (TAF) operation, its third Term Securities Lending Facility (TSLF) operation, as well as the weekly borrowings from the Primary Dealer Credit Facility (PDCF) and the Primary Credit Facility (PCF). While there have been some mixed interpretations of the results, market participants have broadly interpreted the news, particularly for the TAF, as indicative of ongoing, or perhaps even increasing, tensions in the unsecured interbank funding market. Notably, term dollar LIBOR to OIS spreads have continued to widen following the March quarter-end, contrary to the narrowing of these spreads evident following the passage of previous quarter-ends.

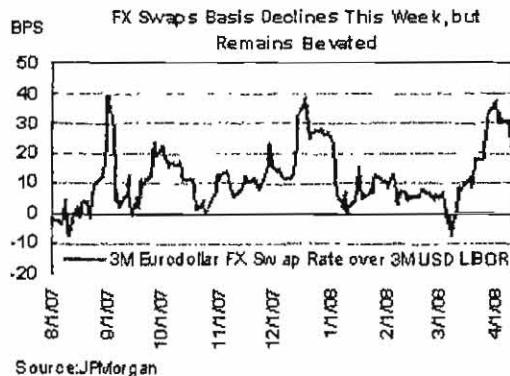
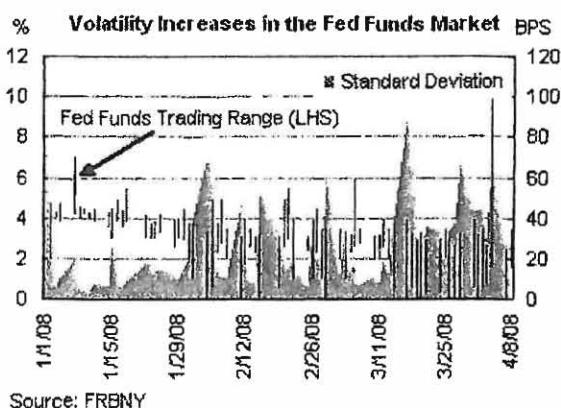
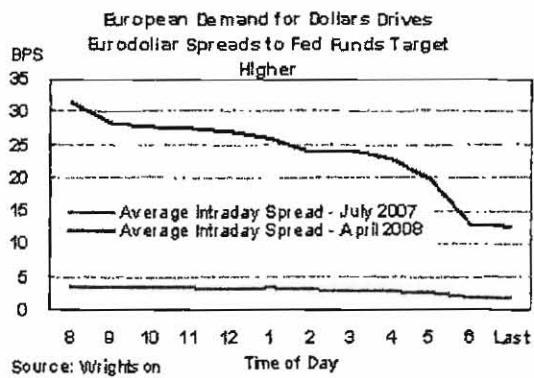
On the margins, some have suggested that the relatively high stop out rate at this week's \$50 billion TAF auction was indicative of the ongoing strains in the interbank market. The TAF auction stopped out at 2.82 percent, or 71 basis points over the minimum bid rate, which is the highest spread since the inception of the TAF program. The stop out rate of 2.82 percent also exceeded the British Banker Association's (BBA) LIBOR fixing rate on that day of 2.72 percent, and the primary credit facility rate of 2.50 percent charged at the discount window.



The fact that banks have paid a premium over the primary credit facility rate at the TAF and in the wholesale market reflects the ongoing stigma associated with the primary credit facility. This is especially true at a time when market participants are particularly sensitive to rumors about financial institutions. Aggregate average levels of borrowing at the Federal Reserve's primary credit facility and the PDCF declined modestly over the week ending Wednesday to \$32.6 billion, respectively, though primary credit facility usage remains elevated relative to historical levels. If not for the perceived stigma, borrowing at the primary credit facility could be even higher.

Further, the fact that the TAF stopped out above LIBOR has also triggered a significant amount of questions over the accuracy of the BBA's LIBOR fixing rate. Over the past few weeks, the 1-month term dollar deposit rate and the 1-month LIBOR fixing have diverged by as much as 30 basis points. The divergence between the two rates is similar to that observed during prior periods of heightened market stress, most notably in August and early December 2007. Our contacts at LIBOR contributing banks have indicated a tendency to under-report actual borrowing costs when reporting to the BBA in order to limit the potential for speculation about the institutions' liquidity problems.

Considering the level of cash rates at the time of this week's TAF auction, the stop out rate was approximately 10 basis points below 1-month term dollar deposit rates obtained from brokers. Given this alternative benchmark, a few analysts have interpreted the TAF's results less negatively.



Though a different set of contributors than the LIBOR panel, data collected by the Federal Reserve Bank of New York on actual brokered fed funds trades may provide a more complete picture of the dispersion of rates paid for dollar funding. This data shows that over recent sessions some banks have paid as much as 10 percent for overnight funds.

However, the fed funds effective rate has been closer to the target this week compared to recent weeks and the standard deviation around the effective rate has declined significantly.

Market participants continue to suggest that demand from European banks for dollar funding is contributing to the tensions in money markets. Some cited the higher-than-expected bid-to-cover ratio of 2.05 percent at the ECB's \$15 billion dollar auction this week as consistent with this. Further, the intraday pattern for rates on dollar funds tends to reach its highest late in the European trading session, but then tends to decline through the U.S. session as U.S.-based banks more actively lend cash to each other.

The euro-dollar FX swap basis also remains at very wide levels, implying stronger demand for dollars. The basis spread measure of the implied dollar cash rate on a 3-month euro-dollar FX swap over the 3-month dollar LIBOR fix is currently around 22 basis points, still near the widest reached in August and early December 2007. This likely suggests that certain financial institutions with relatively easier access to euro funding may be contributing to the demand for dollar funding.

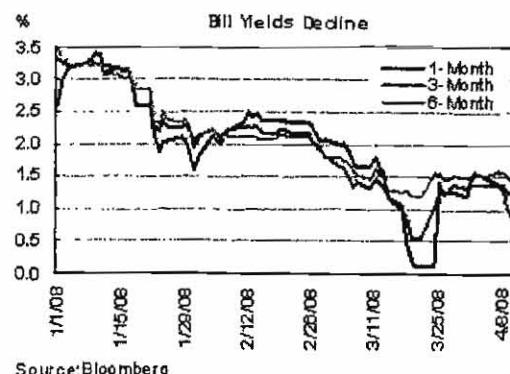
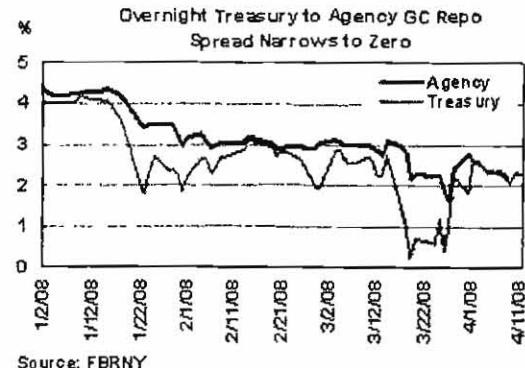
**...While Secured Financing Markets Continue to Show Signs of Stabilization**

The results of recent Fed operations and certain market indicators continue to suggest that secured funding markets have stabilized. Most notable were the results of this week's \$50 billion TSLF auction against "Schedule 2" assets, which includes private label RMBS and CMBS. The auction stopped out at the minimum bid rate of 25 basis points and was undersubscribed at a bid-to-cover ratio of 0.68. Market participants broadly interpreted the results of the auction positively and suggested that this auction, combined with the Federal Reserve's other liquidity operations, may have helped to alleviate primary dealers' demand for funding of lower quality assets. Additionally, market participants have cited the Federal Reserve's \$65 billion in outstanding term single-tranche open market operations as helping to alleviate pressures in the agency MBS market.

Financing rates in the repo market were little changed this week, with the overnight Treasury, agency, and agency MBS repo rates close to fed funds and trading within a few basis points of each other. Some market participants have suggested that the TSLF's provision of Treasury collateral may have offset any downward pressure on Treasury GC rates ahead of next week's April tax data and the associated expected decline in publicly-held bill supply. Bill yields declined as much as 60 basis points this week in anticipation that bill supply could decline from the current level of over \$1 trillion to approximately \$850 billion over the next month.

The implied financing cost for agency MBS from the dollar roll market has declined by 40 basis points since mid-March. Agency MBS traders have highlighted the TSLF and the single-tranche term open market operations as alleviating some of the funding pressure in their market. Further, financing costs for private-label RMBS have also stabilized. For example, 1-month AAA private-label RMBS was funded at roughly 2.40 percent this week compared to 2.80 percent last week.

However, some market participants' interpretation of the Federal Reserve's actions were less sanguine. Some have suggested that the list of eligible Schedule 2 assets is too narrow, limiting participation in the auction. In particular, hedge fund contacts have suggested that the program does little to improve financing conditions of the broader non-investment grade and non-agency ABS markets. Further, this week, the American Securitization Forum and the Securities Industry and Financial Market Association (SIFMA) sent a letter to Chairman Bernanke and New York Fed President Geithner encouraging them to accept student loan asset-backed securities at the TSLF to ensure the continued functioning of this market.



## Other Updates

### Global Monetary Policy

- As expected, the ECB Governing Council unanimously voted to leave its policy rate unchanged at 4.00 percent. In its statement, the ECB continued to highlight the risk of higher inflation, in line with recent commentary. Additionally, market analysts noted that, as expected, the ECB slightly emphasized downside growth risks, while recognizing that its base scenario remains for "moderate but ongoing GDP growth." Market participants also focused on President Trichet's emphasis on the possibility that "the level of uncertainty resulting from the turmoil in financial markets remains unusually high and tensions may last longer than initially expected." On balance, expectations for future policy rates were little changed, with the 1-month forward EONIA swap curve reflecting one 25 basis point cut in late 2008.
- As widely expected, the Bank of England monetary policy committee (MPC) cut its policy rate by 25 basis points to 5.00 percent, citing tightening credit conditions and a slowdown in the economy. The accompanying statement highlighted the MPC's expectation for inflation to rise further in the near-term and the risk that it could remain above the Bank's inflation target. However, the statement also indicated that financial market conditions could lead to a slowdown in the economy that will bring inflation back below the target. According to one dealer's model, overnight index swaps imply a 40 percent chance of a 25 basis points cut at the May MPC meeting.
- As expected, the Bank of Japan (BoJ) left its policy rate unchanged at 0.50 percent. More notably, this was the first policy meeting led by newly appointed BoJ Governor Shirakawa. The Governorship had been vacant since former Governor Fukui's term expired in mid-March, as the Japanese legislature failed to appoint a replacement due to an ongoing power struggle between the country's two leading political parties. While some believe the BoJ could cut rates in the next year if the domestic economy decelerates further, few expect Governor Shirakawa to advocate a material change in the BoJ's current stance to a modest policy tightening bias. This bias has been supported by recent increases in the y.o.y. change in core CPI to 1.0 percent, the highest reading in almost a decade. Nevertheless, overnight index swap rates imply a 40 percent probability that the BoJ will ease the policy rate 25 basis points by December 2008, though this has been pared back from a 60 percent probability at the time of the BoJ's March policy meeting.

## Credit Markets

- S&P downgraded the financial strength ratings for the mortgage insurers MGIC, PMI and Radian to A, A+, and A, respectively. Market participants will focus on the reaction of the GSEs to the downgrades. Historically, the GSEs required a minimum financial strength rating of AA- from two major rating agencies in order to conduct business, although the GSEs recently announced that there is some flexibility around this minimum requirement. S&P is the first rating agency to downgrade the mortgage insurers below AA-. Analysts indicate that even if other rating agencies follow S&P's actions, they expect the GSEs to continue to accept business from the recently downgraded mortgage insurers since these companies comprised nearly 60 percent of the mortgage insurance industry's marketshare as of 2007. Still, some expect GSE business going forward to be more concentrated in PMI and MGIC since Radian is viewed as having the weakest capital position among these big three firms. Shares of MGIC, PMI and Radian were 15, 2, and 10 percent lower on the week, while Radian's CDS spread widened 170 basis points.

## ABCP

- Following Moody's move last Friday, S&P downgraded the long-term ratings of Gordian Knot's Sigma SIV to AA- from AAA, while affirming its short-term debt ratings at A-1+. Moody's downgraded Sigma's long-term ratings to A2 from AAA as well as its short-term ratings to P2 from P1. Both firms cited uncertainties around Sigma's ability to continue funding amid current market stresses. Sigma has been essentially shut out of the commercial paper and medium-term note markets since last year and has instead raised funding via \$26 billion of repurchase agreements to roll over maturing liabilities and fund its \$40 billion portfolio. According to the Moody's press release, Sigma has \$23 billion in long-term debt and \$325 million in commercial paper outstanding, about \$20 billion of which will mature before the end of September. Both ratings agencies have kept Sigma's ratings on review for further downgrade.

- Canaccord Capital announced that it will purchase nonbank Canadian ABCP from clients holding less than CAD 1 million of the securities if the clients support the Montreal Accord to restructure these securities. Canaccord's clients eligible for the plan make up nearly three-quarters of the 2,000 small investors in Canada's nonbank ABCP market and have been the main holdouts to the restructuring agreement. Obtaining the approval of small investors is key to moving forward with the restructuring since each investor has one vote, irrespective of the size of their stake in nonbank ABCP. Investors are expected to vote on the restructuring agreement on April 25, which, with the support of eligible Canaccord clients, is likely to meet the majority vote needed to pass.

## Currencies

- The majority of market participants do not expect any material change in the G-7 statement related to foreign exchange at this weekend's meeting of G-7 finance ministers and central bankers in Washington D.C. However, they will be highly attentive to comments from U.S. Treasury officials regarding the dollar, given its recent sharp depreciation and heightened commentary from euro-area officials expressing concern regarding recent price action. Specifically, analysts highlight that both ECB and euro-area officials have increasingly expressed a common tone and stance regarding the depreciation of the dollar. Market participants also expect this weekend's discussions among policymakers will likely focus on current issues in global funding and credit markets and may result in the announcement of a coordinated global central bank effort to address these issues.

## On Deck Next Week

Next week, the economic data calendar picks up with several key releases including retail sales, CPI, the Empire State and Philadelphia manufacturing indices, several housing-related releases, and the Fed's Beige Book. Retail sales data are likely to be a key focus as market participants attempt to gauge the extent to which the consumer has been hit by recent financial market and economic stresses. At least 6 Federal Reserve officials will speak on various topics, including the economic outlook, monetary policy, credit markets, liquidity, and systemic risk. Notably, Governor Kohn speaks next Thursday on the implications that the current market turmoil have on banking. In addition, earnings releases by several large banks are likely to garner significant attention. On Tuesday, Washington Mutual and Bear Stearns reports Q1 earnings, while JP Morgan Chase reports on Wednesday, Merrill Lynch and MGIC on Thursday, and Citigroup on Friday.

## Market Data

### Key Indicators:<sup>1</sup>

	Current	Change on Week	Weekly Percentile Change	12 Weeks Ago
3rd Fed Funds Contract	1.84%	-0.05	82%	3.35%
2Y Treasury	1.75%	-0.06	42%	2.35%
10Y Treasury	3.47%	0.00	3%	3.63%
10Y Bund	3.95%	-0.03	33%	3.97%
10Y JGB	1.38%	0.04	50%	1.44%
10Y TIPS	1.15%	-0.01	12%	1.42%
EUR-USD	1.5799	0.4%	22%	1.4622
USD-JPY	101.03	-0.4%	34%	106.87
S&P 500	1346	-1.8%	75%	1325
BBB Corp. Spread (bps)	314	-8	33%	251

### Other Significant Movers on The Week:<sup>2</sup>

	Current	Change on Week	Weekly Percentile Change	12 Weeks Ago
Canadian Dollar	1.0216	1.3%	78%	1.0273
Singapore Dollar	1.3572	-1.7%	99%	1.4382
S&P 500	1346	-1.8%	76%	1325
Wilshire 5000	13587	-1.7%	76%	13308
Topix Bank Sub-Index	259	-3.9%	80%	276
Korea Composite Index (KOSPI)	1702	3.4%	80%	1864
DJ Euro Stoxx Index	353	-2.3%	76%	373
U.S. 2/10s Slope (bps)	165.00	-14.30	96%	123
France 2/10s Slope (bps)	54	9	90%	39
Canada 2/10s Slope (bps)	86.6	12	92%	57
Hong Kong 10Y Yield	2.43%	-0.23	92%	2.61%
Hong Kong 2/10s Slope (bps)	119	-11.9	81%	83
Denmark 2Y Yield	3.83%	-0.11	82%	3.80%
Denmark 2/10s Slope (bps)	34	8	83%	30
Spain 2/10s Slope (bps)	61	6.7	82%	49
Sweden 2/10s Slope (bps)	20.6	10	89%	31
Switzerland 2/10s Slope (bps)	132	6	79%	92
Moive Treasury Options Index	128	-12	91%	137
2Y Swap Spread	82	3	78%	68
30Y Swap Spread	35	3	79%	51
EMBI+	277	-14	80%	222
10Y Fannie Spread	66	4	83%	55
10Y Freddie Spread	73	5	82%	57
Fannie Stock	\$26.91	-11%	94%	\$32.15
Freddie Stock	\$24.03	-13%	96%	\$27.66
Front Month Oil	\$109.53	\$3.30	86%	\$90.57
Front Month Gasoline	\$1.54	-\$0.08	76%	\$1.50
Front Month Heating Oil	\$3.17	\$0.18	98%	\$2.51
CRB Commodities Index	408	13	97%	361

### Central Bank Watch

	Last Move	Current Policy Rate	Implied 3-month rate on June-08 interest rate futures contract	Next Meeting
Federal Reserve	+75 bps (3/18/08)	2.25%	2.465%	April 30
ECB	+25 bps (6/06/07)	4.00%	4.625%	May 8
Bank of Japan	+25 bps (2/21/07)	0.50%	0.810%	April 30
Bank of England	+25 bps (4/10/08)	5.00%	5.570%	May 8
Bank of Canada	+50 bps (3/4/08)	3.50%	3.165%	April 22

<sup>1</sup> For each asset, 12 pm Friday price/yield is shown, along with change since previous Friday's close, percentile rank of the week's move, and level from three months ago. Percentile rank, a measure of the significance of the change on the week, is calculated from a series of weekly price/yield changes over the previous five years. Percentile rank of positive and negative moves are calculated separately. For example, a 10 bp weekly increase in the 2-year Treasury yield with a percentile rank of 60 percent indicates that this change on the week is greater than 60 percent of all weekly yield increases for the 2-year note over the past five years.

<sup>2</sup> This table displays similar information as in the Key Indicators table for all assets with a weekly change that falls within the 75<sup>th</sup> or higher percentile ranking over weekly moves over the past five years.

# Recent Developments in Short-Term Funding Markets

*Patrick Dwyer  
Steven Friedman  
Matt Raskin  
Fabiola Ravazzolo  
Matthew Rutherford*

*U.S. Department of the Treasury  
May 6, 2008*

# Overview

- Key terms
- Why is LIBOR elevated?
- Demand for the Term Auction Facility (TAF)
- Importance of money market funds as lenders to banks and dealers
- The importance of LIBOR and issues with its construction
- Role of the Term Securities Lending Facility (TSLF)
- Dealer provision of secured funding to clients

## Key Points

- Unsecured bank funding rates remain elevated due to lenders' counterparty credit concerns, particularly regarding European banks. Lenders in the interbank market are also more sensitive to their own potential liquidity needs.
- Recent expansion of Term Auction Facility (TAF) and reciprocal currency arrangements with ECB and SNB could help ease strains in money markets at the shortest maturities.
- Even in the best of circumstances, LIBOR has its shortcomings. These are even more pronounced at present.
- Term Securities Lending Facility has eased pressures in repo markets for the highest-quality collateral.
- Dealers remain balance sheet constrained; as such, they are providing limited liquidity to clients in repo markets.

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# Some Key Money Market Terms

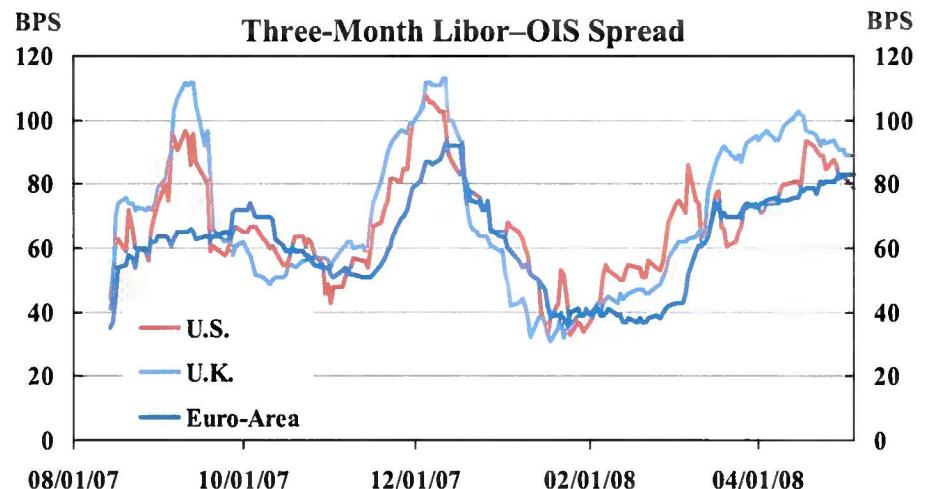
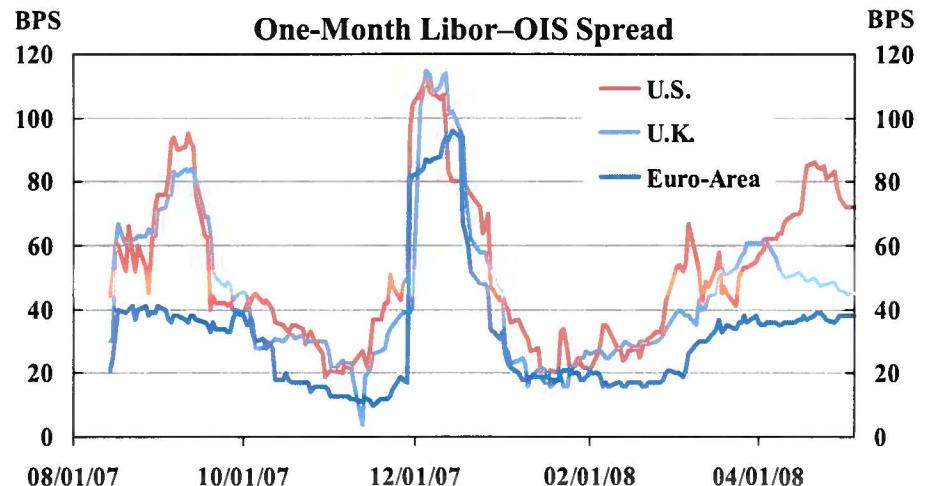
- The **BBA's LIBOR** (London Interbank Offered Rate) is a benchmark of the rate at which banks can borrow unsecured funds from other banks.
  - BBA publishes LIBOR each day at 11 am London time
  - Based on a sample of rates from 16 contributing banks, with the majority being European institutions
  - LIBOR is *indicative only* - it does not represent the level at which contributing banks raise funds
- The **Overnight Index Swap rate (OIS)** is an interest rate swap that provides a measure of the expected average overnight fed funds rate over a particular horizon.
- A widening **spread between LIBOR and OIS** at the same maturity can be viewed as reflecting increasing liquidity and/or counterparty credit concerns.

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## Spread of LIBOR to OIS rates

- Spreads of U.S. dollar LIBOR fixings to OIS rates have widened considerably since last summer.
- Similar spreads for the euro and sterling have also widened, though demand for 1-month dollar funding is most pronounced.



## Why is LIBOR elevated?

- Banks are paying higher rates for funding on increasing counterparty credit risk concerns, in particular:
  - European banks believed to be paying up for funding;
  - many money market lenders, such as money funds and securities lenders, have been more selective in their credit allocation.
- Liquidity risk: Since last summer, banks have been more reluctant to lend in the interbank market due to concerns over their own liquidity.

## Why is LIBOR elevated?

- European institutions are paying up for cash:
  - to fund particularly dollar-denominated assets, such as structured credit and subprime mortgage securities;
  - to shore up liquidity position given uncertainties regarding the length of current money market dysfunction;
  - as lenders are increasingly selective in choosing counterparties (credit tiering). Some have stopped lending to smaller European banks, such as the German landesbanks and U.K. building societies.

## Why is LIBOR elevated?

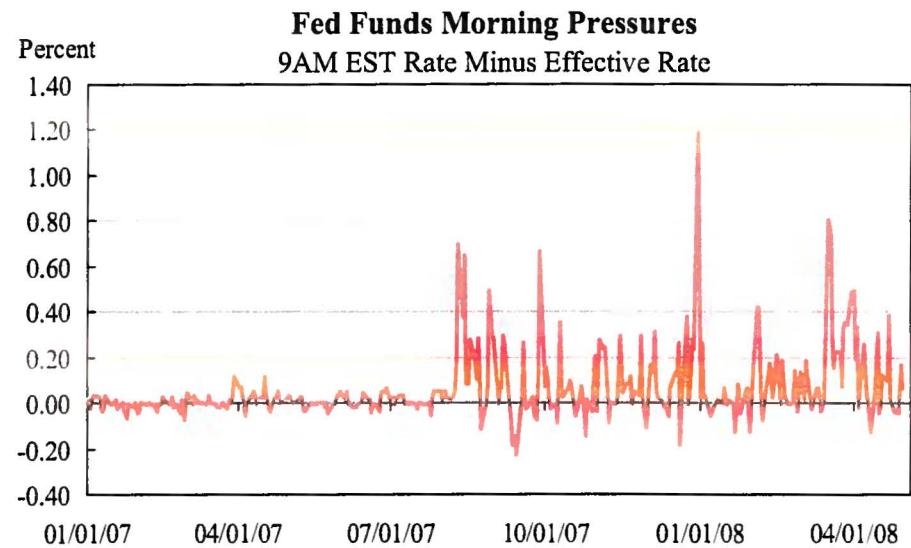
- Negative perception of European banks
  - European banks are generally less transparent than their U.S. counterparts regarding their exposures (subprime, structured credit) and valuations/writedowns.
  - The more fragmented European supervisory system also contributes to perception that European banks are under greater stress than their U.S. counterparts.
  - European institutions observed funding euro needs by paying higher rates for borrowing dollars and swapping back to euros.

# Overview

- Key terms
- Why is LIBOR elevated?
- **Demand for the Term Auction Facility (TAF)**
- Importance of money market funds as lenders to banks and dealers
- The importance of LIBOR and issues with its construction
- Role of the Term Securities Lending Facility (TSLF)
- Dealer provision of secured funding to clients

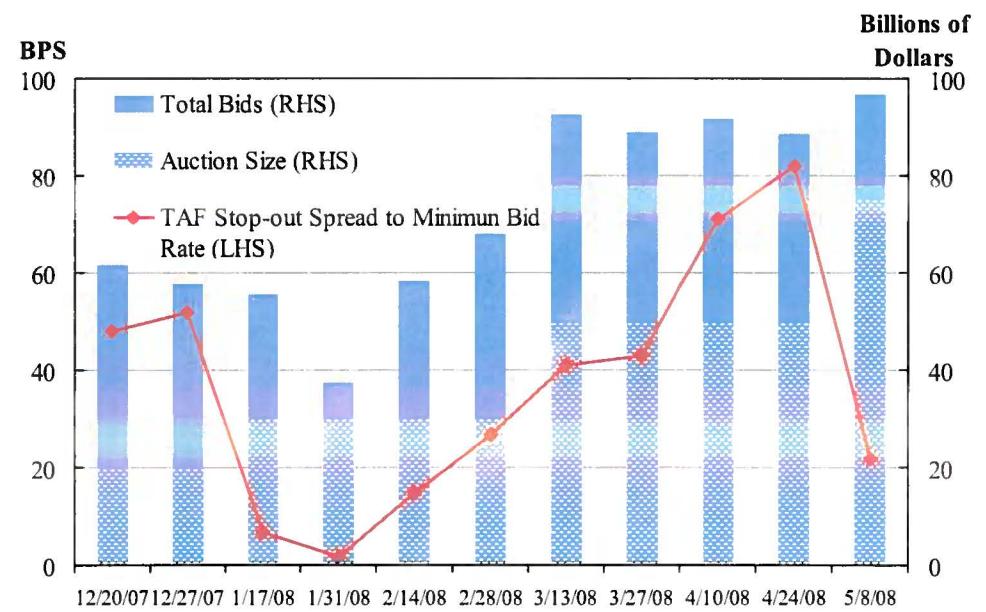
## European Demand Pressures Overnight Rates

- Demand from European banks has persistently pressured morning fed funds rates since August
- Morning rates are frequently well above the fed funds target on non-high-payment-flow days
- Rates often trade sharply lower as European demand subsides over the session



## Term Auction Facility Demonstrates Demand

- Participation has been strong, growing since a short-lived improvement in market conditions in January
- The amount of bids, the number of institutions participating, and the bid rates have all increased



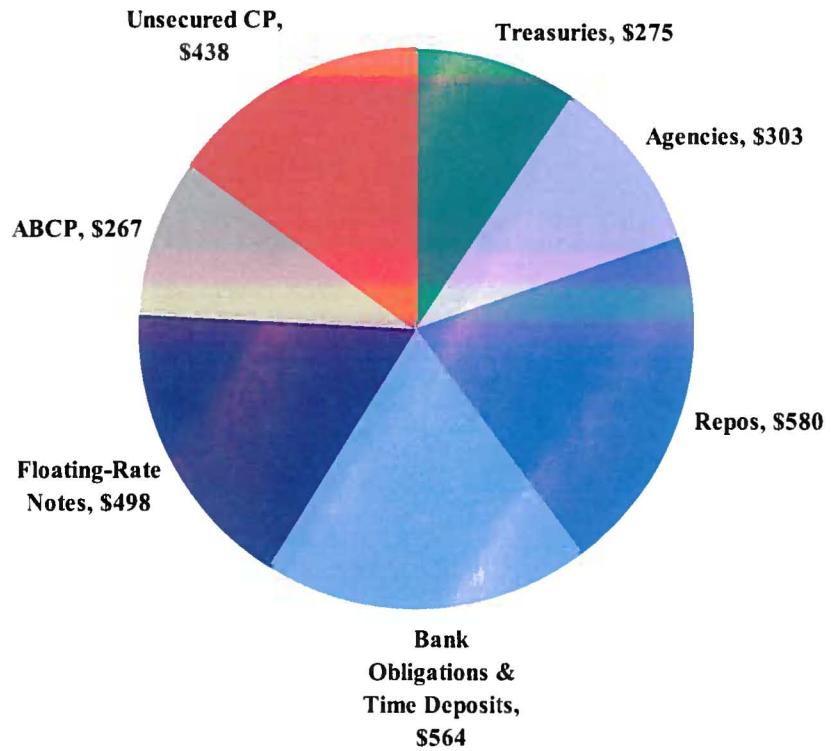
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# Money Market Mutual Funds

- Predominant money market investors and key source of funding for banks and dealers
- Funds have limited lending to some lesser-name banks and have reduced their holdings of asset-backed commercial paper
- Funds have shortened maturities, partly due to credit concerns, and increased overnight liquidity given the risk of large investor redemptions

**Taxable Money Fund Portfolio Allocations**  
4/29/2008, in billions



## Money Market Mutual Funds (Cont.)

- Funds have not recently made significant changes to credit limit and exposure amounts in secured lending to dealers
- However, funds have limited maximum maturities and collateral types with some dealers
- Many funds indicate that PDCF and TSLF programs give them comfort with dealer counterparties; some suggest they might not otherwise continue to transact with all dealers
- Most funds are seeking increased collateral haircuts, due to market volatility, not counterparty credit concerns

# Overview

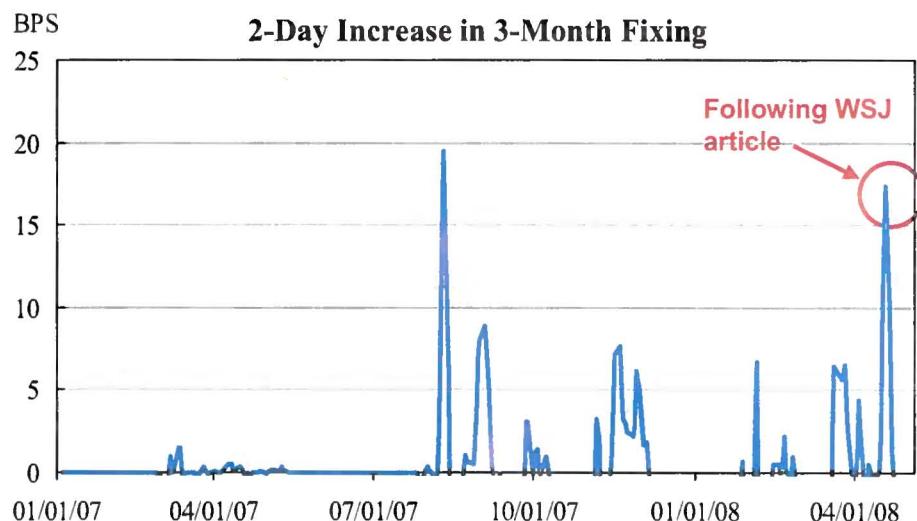
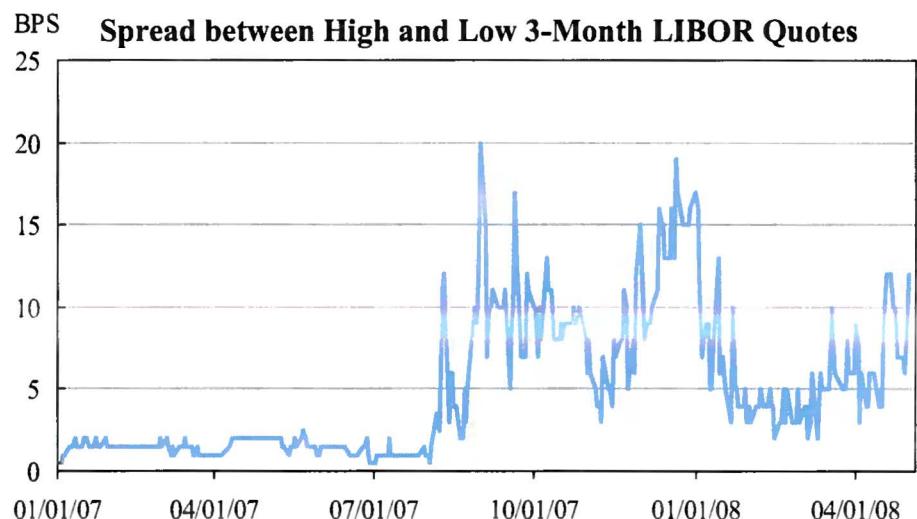
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## Why LIBOR Matters

- As discussed, LIBOR provides a gauge of conditions in wholesale unsecured funding markets
- LIBOR is referenced in a wide variety of financial contracts:
  - Interest rate swaps, interest rate futures, mortgages, leverage loans, etc.
- LIBOR is used to price many assets, even if not contractually linked
- Dislocations can be transmitted to markets that don't directly reference LIBOR

# Recent Market Concerns re: LIBOR

- Questions regarding LIBOR's accuracy and relevance:
  - Banks' incentive to avoid signaling funding challenges
  - LIBOR's focus on the London interbank market, at 11am GMT
- Suggestions that banks were actually misquoting LIBOR:
  - Anecdotal evidence of bidding above LIBOR quotes
  - “Re-pricing” following WSJ article and BBA response
  - Difficult to gauge the extent – liquidity, timing, “market size”



# Addressing LIBOR Remains a Focus

- Current efforts to address LIBOR:
  - The BBA is expediting scheduled reviews of the panel and construction
  - ICAP recently proposed the New York Funding Rate (“NYFR”) as a supplementary index for wholesale unsecured funding rates (see appendix for details)
- Market participants are skeptical that LIBOR will lose its benchmark status, but see some changes as possible:
  - Market may increase indexing to alternatives going forward – e.g., OIS,
  - Continued LIBOR volatility may affect the details of interest rate swaps contracts – e.g., re-set dates aligned with Eurodollar futures

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## Term Security Lending Facility (TSLF)

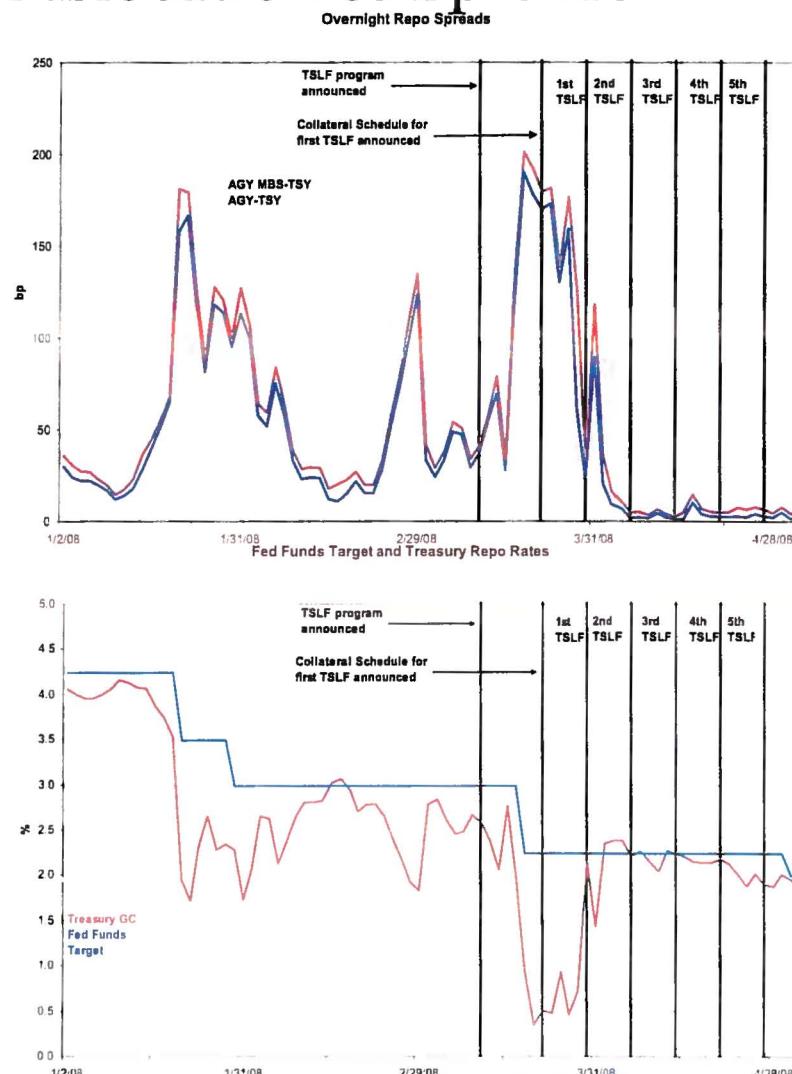
- New “reserve neutral” liquidity tool
  - Reserve neutrality allows for faster ramp-up and unwind as there is no need to execute offsetting redemptions or sales of Treasury holdings. Nonetheless, it places a hold on Treasuries loaned (encumbers SOMA).
- Designed to complement existing daily securities lending operation which improves liquidity of *specific issue* repo market by limiting settlement fails.
  - Treasury collateral substituted out of TSLF if it becomes special
- TSLF provides “near cash” instead of a direct loan of cash
  - Not a perfect substitute for Open Market RP (which is a direct cash loan)
  - Dealer must enter another transaction with counterparty to convert Treasury collateral into cash (TSLF not necessarily useful for dealers with counterparty concerns)
  - Conversion of Treasury collateral into cash may add a floating cost if dealers place Treasury collateral in overnight repo market (fixed term/variable cost).

## Term Security Lending Facility (TSLF)

- TSLF designed to narrow the spread between Treasury collateral rates and pledged collateral rates (increases supply of Treasury and demand for pledged collateral simultaneously).
- TSLF designed to improve liquidity and function in both Treasury and pledged collateral markets.
  - Monetary policy conducted in Treasury market
  - Monetary policy transmission improved by more liquid pledged collateral markets
- One-month term bond-for-bond securities loan (a swap of Treasury collateral for “riskier” collateral)
  - Single price auction with minimum price set slightly above “normal” spread between Treasury and eligible collateral repo rates.
  - Program might become “self-liquidating” as minimum price unattractive under normal conditions
  - Recent auctions undersubscribed at minimum price
    - Positive in that it reflects limits to dealer need for assistance
    - Although dealers report they generally are not extending facility to customers due to balance sheet concern

## TSLF Reduces Repo Dislocation & Spreads

- The narrowing of repo spreads since the first TSLF largely reflects increases in Treasury RP rates as opposed to decreases in agency and MBS RP rates.
  - TSLF Treasury supply impact is more concentrated than increase in demand for “risky” collateral as a range of “riskier” collateral is eligible
- Treasury RP rates were very low relative to policy rate before TSLF due to “flights to safety”
- Return to more normal spread



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## Dealer provision of secured funding to clients

- No significant changes in haircuts since the deleveraging of February and early March; haircuts have stabilized at higher levels
- But access to financing beyond one month is difficult/non-existent beyond highest-quality collateral
- Hedge funds and other dealer clients do not expect near-term improvements, citing balance sheet constraints at many dealers

Haircuts by Asset Class for One-Month Tenor

	<i>Date</i>	<i>Average</i>
<b>Treasury</b>	9-Apr	0.6%
	10-Mar	0.4%
	3-Mar	0.3%
	1-Feb	0.2%
<b>Agency Debt</b>	9-Apr	2.1%
	10-Mar	1.9%
	3-Mar	1.1%
	1-Feb	1.1%
<b>Agency MBS</b>	9-Apr	6%
	10-Mar	5%
	3-Mar	3%
	1-Feb	3%
<b>Non-agency MBS</b>		
<b>Prime</b>	9-Apr	27%
	10-Mar	19%
	3-Mar	16%
	1-Feb	11%
<b>Alt-A</b>	9-Apr	36%
	10-Mar	28%
	3-Mar	16%
	1-Feb	16%
<b>Corporate Debt</b>		
<b>High Grade</b>	9-Apr	18%
	10-Mar	15%
	3-Mar	13%
	1-Feb	10%
<b>High Yield</b>	9-Apr	39%
	10-Mar	27%
	3-Mar	27%
	1-Feb	24%

Source: FRBNY survey of buy-side firms

# Appendix



## Forms of Federal Reserve Lending to Financial Institutions

	Regular OMOs	Single-Tranche OMO Program (announced March 7, 2008)	Discount Window <sup>1</sup>	Term Discount Window Program (announced August 17, 2007)	Term Auction Facility (announced December 12, 2007)	Primary Dealer Credit Facility (announced March 16, 2008) <sup>2</sup>	Securities Lending	Term Securities Lending Facility (announced March 11, 2008)
Who can borrow?	Primary dealers	Primary dealers	Depository institutions	Primary credit-eligible depository institutions	Primary credit-eligible depository institutions	Primary dealers	Primary dealers	Primary dealers
What are they borrowing?	Funds	Funds	Funds	Funds	Funds	Funds	U.S. Treasuries	U.S. Treasuries
What collateral can be pledged?	U.S. Treasuries, agencies, agency MBS	U.S. Treasuries, agencies, agency MBS	Full range of Discount Window collateral	Full range of Discount Window collateral	Full range of Discount Window collateral	U.S. Treasuries, agencies, agency MBS, investment grade debt securities <sup>3</sup>	U.S. Treasuries	U.S. Treasuries, agencies, agency MBS, AAA/Aaa-rated private-label RMBS, CMBS, agency CMO and other ABS
Is there a reserves impact?	Yes	Yes	Yes	Yes	Yes	Yes	No (loans are bond-for-bond)	No (loans are bond-for-bond)
What is the term of loan?	Typically, term is overnight–14 days <sup>4</sup>	28 days <sup>5</sup>	Typically overnight, but up to several weeks <sup>6</sup>	Up to 90 days <sup>7</sup>	28 days <sup>5</sup>	Overnight	Overnight	28 days <sup>5</sup>
Is prepayment allowed if term is greater than overnight?	No	No	Yes	Yes	No	N/A	N/A	No
Which Reserve Banks conduct operations?	FRBNY	FRBNY	All	All	All	FRBNY	FRBNY	FRBNY
How frequently are operations conducted?	Typically once or more daily	Typically weekly	As requested	As requested	Every other week	As requested	Daily	Weekly
Where are statistics reported publicly?	Temporary OMO activity	Temporary OMO activity <sup>8</sup>	H.4.1 - Factors Affecting Reserve Balances	H.4.1 - Factors Affecting Reserve Balances	H.4.1 - Factors Affecting Reserve Balances	H.4.1 - Factors Affecting Reserve Balances	Securities lending activity	Term securities lending facility activity

<sup>1</sup> Discount Window includes primary, secondary and seasonal credit programs.<sup>2</sup> The PDCF will remain in operation for a minimum period of six months and may be extended as conditions warrant.<sup>3</sup> Investment grade debt securities include corporate securities, municipal securities, mortgage-backed securities and asset-backed securities.<sup>4</sup> Open market operations are authorized for terms of up to 65 business days.<sup>5</sup> 28-day term may vary slightly to account for maturity dates that fall on Bank holidays.<sup>6</sup> Primary credit loans are generally overnight. Loans may be granted for term beyond a few weeks to small banks, subject to additional administration.<sup>7</sup> Maximum maturity of term increased from 30 to 90 days on March 16, 2008.<sup>8</sup> Data only available on days when 28-day term RP operations are conducted.

FEDERAL RESERVE BANK *of* NEW YORK

**Federal Reserve Term Auction Facility:**

<u>Auction Settlement</u>	<u>Term</u>	<u>Amount</u>	<u>Minimum Bid Rate</u>	<u>Stop-out Rate</u>	<u>Propositions</u>	<u>Bid/Cover</u>	<u>Bidders</u>
12/20/2007	28 Days	\$20 b	4.17%	4.65%	\$61.6 b	3.08	93
12/27/2007	35 Days	\$20 b	4.15%	4.67%	\$57.7 b	2.88	73
1/17/2008	28 Days	\$30 b	3.88%	3.95%	\$55.5 b	1.85	56
1/31/2008	28 Days	\$30 b	3.10%	3.12%	\$37.5 b	1.25	52
2/14/2008	28 Days	\$30 b	2.86%	3.01%	\$58.4 b	1.95	66
2/28/2008	28 Days	\$30 b	2.81%	3.08%	\$68.0 b	2.27	72
3/13/2008	28 Days	\$50 b	2.39%	2.80%	\$92.6 b	1.85	82
3/27/2008	28 Days	\$50 b	2.19%	2.62%	\$88.9 b	1.78	88
4/10/2008	28 Days	\$50 b	2.11%	2.82%	\$91.6 b	1.83	79
4/24/2008	28 Days	\$50 b	2.05%	2.87%	\$88.9 b	1.77	89

**Term Securities Lending Facility:**

<u>Auction Settlement</u>	<u>Term</u>	<u>Collateral</u>	<u>Amount</u>	<u>Minimum Fee Rate</u>	<u>Stop-out Rate</u>	<u>Propositions</u>	<u>Bid/Cover</u>
3/28/2008	28 Days	Schedule 2	\$75 b	0.25%	0.33%	\$86.1 b	1.15
4/4/2008	28 Days	Schedule 1	\$25 b	0.10%	0.16%	\$46.9 b	1.88
4/11/2008	28 Days	Schedule 2	\$50 b	0.25%	0.25%	\$40.0 b	0.68
4/18/2008	28 Days	Schedule 1	\$25 b	0.10%	0.10%	\$35.1 b	1.40
4/25/2008	28 Days	Schedule 2	\$75 b	0.25%	0.25%	\$ 59.5 b	0.79
5/2/2008	28 Days	Schedule 1	\$25 b	0.10%	0.10%	\$24.1 b	0.96

## Appendix: USD LIBOR Panel Members

- *US*: Bank of America, Citibank, JP Morgan
- *Japanese*: Bank of Tokyo – Mitsubishi UFJ, Norinchukin
- *European*: Barclays, Credit Suisse, Deutsche Bank, HBOS, HSBC, Lloyds, Rabobank, RBS, UBS, West LB
- *Canadian*: RBC

## Appendix: ICAP's NYFR

- According to ICAP, NYFR will be constructed in the following manner:
  - Respondents will be asked to estimate the rate at which a representative A1/P1 bank would be likely to obtain unsecured funds, rather than the rates at which they themselves could borrow (note: not just interbank)
  - Rates will be collected at 9:30am ET, for the 1-month and 3-month tenors; rates will be published around 10am ET
  - The number of contributors will vary from day to day, and will be at least 24 and perhaps as high as 40
  - NYFR will be calculated as the trimmed mean of all responses, with the 6 top and bottom responses dropped
  - Rates will be published, but not the names of individual contributors
- ICAP suggested last week that NYFR may launch as soon as this week

## Recent Concerns Regarding LIBOR's Credibility

Samuel Cheun and Matt Raskin

- LIBOR is a measure of interbank deposit rates constructed by the British Banker's Association (BBA), in which a panel of banks are asked to report the rate at which they could borrow unsecured funds in the London interbank market. In addition to LIBOR's use as a gauge of conditions in the unsecured funding markets, it is referenced by a broad spectrum and enormous volume of financial contracts, including interest rate swaps, Eurodollar futures, consumer mortgages, and corporate loans.
- Concerns regarding the credibility of USD LIBOR have emerged over the past month, as market participants have questioned whether the rates contributed by panel banks accurately reflect the rates at which they could actually obtain funds. Several features of LIBOR have contributed to these concerns, including the definition of the rate and ambiguity in the reporting process.
- A variety of changes designed to enhance LIBOR's credibility have been proposed by market participants, including changes to the rate definition, time of the fixing, and size and composition of the panel. The focus on LIBOR's shortcomings have prompted the BBA to expedite its annual review of the panel to May 30, and ICAP, a brokerage firm, to announce the launch of an alternative measure, the New York Funding Rate.

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This piece provides an update on recent developments regarding LIBOR and addresses the following questions:

- What is LIBOR, how is it determined, and why does it matter?
- What are the current shortcomings of LIBOR?
- What evidence exists that banks were misquoting to the LIBOR panel?
- What changes designed to enhance LIBOR's credibility have been proposed by market participants?
- What is the BBA doing to address these concerns?
- What is the "New York Funding Rate" (NYFR)?

### What is LIBOR, how is it determined, and why does it matter?

LIBOR is a measure of representative interbank deposit rates in the London market. Specifically, each member of a panel of banks reports the rate at which it "could borrow, were it to do so by asking for and then accepting inter-bank offers in reasonable market size just prior to 11:00am London time." (Interestingly, several weeks after the media began to focus on LIBOR's shortcomings there remained widespread confusion over this definition, even among BBA panel banks and Eurodollar brokers.)

Quotes are provided for 15 maturities, ranging from overnight to 1-year (O/N, 1-week, 2-weeks, 1-month, 2-month....11-month, 1-year), and in 10 currencies. The size and set of contributing banks varies by currency, but there is tremendous overlap. For example, Deutsche Bank contributes to all of the panels, meaning it provides 150 rate quotes each day (10 currencies x 15 tenors). The USD LIBOR panel has 16 members – 10 European/UK banks, 3 US banks, 2 Japanese banks, and 1 Canadian bank.

The LIBOR "fixing" is calculated as the interquartile mean of the quotes provided in each currency and tenor – that is, the top 25 percent and bottom 25 percent of the quotes are discarded, and the remaining quotes are averaged to compute LIBOR at each maturity. The LIBOR fixings and individual quotes are published before noon London time, and are distributed via Reuters. All individual quotes – both names and rates – are published, even those that do not fall within the middle 50 percent and thus do not factor into the calculation of LIBOR.

The membership of each LIBOR panel is reviewed annually by a group of 13 active market practitioners ("the Foreign Exchange and Money Markets Committee"). According to the BBA, decisions on membership are made, "on the basis of scale of activity in the London market, perceived expertise in the currency concerned, reputation, and due consideration of credit standing."

In addition to LIBOR's use as a gauge of conditions in term unsecured funding markets, it is referenced by and/or used to price a broad spectrum and enormous volume of financial contracts, including interest rate swaps, Eurodollar futures, consumer mortgages, and corporate loans. For example, data from the BIS and ISDA indicate that, as of June 2007, the notional value of OTC interest swaps that reference USD LIBOR was more than \$100 trillion.

### **What are the current shortcomings of LIBOR?**

Most of the recent concern regarding LIBOR has focused on US dollar LIBOR panel, and in particular on what might be called its "credibility" or "accuracy" – the question of whether panel banks accurately report the rates at which they could actually borrow unsecured dollars. Several features of the LIBOR process and definition contribute to these concerns:

- Banks quote the rate at which they "could borrow funds" and these rates are published. This may lead to some deliberate misreporting designed to avoid the stigma of revealing high funding costs.
- The panel is asked to provide quotes that are subject to ambiguity along at least two dimensions. First, the transaction size is not clearly specified. Second, quotes are often given for maturities (e.g., 7-month LIBOR) or in market conditions (e.g., now) in which there is little or no actual interbank term activity. The lack of clarity results in panel members using dissimilar methods for determining quotes.
- Many market participants feel the BBA does not currently have sufficient monitoring mechanisms in place to ensure the quality or validity of the quotes.

Note: although some analysts point out that the panel banks may have incentives to misreport in order to manipulate the level of the LIBOR fixing, and thereby influence their funding or derivative positions, this is not the primary driver of recent alleged misquotes.

In addition to these concerns regarding "credibility", many market participants have raised questions about LIBOR's "relevancy" – whether rates in the London interbank market at 11:00am are the best gauge of conditions in unsecured funding markets, or the best benchmark rate for derivatives or loans. Many features of ICAP's NYFR (see below) are aimed at addressing this. In any case, the information value of any single summary statistic is bound to be limited in the current environment, amid heightened credit tiering and name-specific lending.

### **What evidence exists that banks were misquoting to the LIBOR panel?**

Around the time the WSJ article first reported on this matter in mid-April, we heard from several Eurodollars brokers and bank funding desks that many LIBOR banks were bidding for funds up to 25 basis points above their LIBOR quotes in the same maturity on the same day. The BBA also received a number of formal complaints along these lines. Several of these market participants suggested that discrepancies between funding rates and LIBOR quotes had existed since at least last August, but had gotten marginally worse since mid-March.

Additionally, around days on which the BBA's efforts to address LIBOR have received media attention, there have been fairly dramatic increases in the LIBOR fixings. For example, in the two days surrounding the WSJ's April 16 article, 3-month LIBOR increased 17 bps, which was the largest two-day increase in the rate since August 9. Earlier this week, as the integrity of LIBOR again received attention, 1-year LIBOR increased 21 bps, and OIS and fed funds-LIBOR basis swaps suggest that a large portion of this rise was not due to a re-pricing of policy expectations.

Beyond the anecdotal evidence and LIBOR re-sets, it is difficult to find convincing evidence of actual misreporting. Few public sources of data on actual Eurodollar transaction rates exist, and again, the extent of credit tiering makes it difficult to extrapolate from what data there is. When the story initially broke in April (and even before), analysts pointed to the deviation between 3-month LIBOR and the Board of Governor's H.15 time series on 3-month Eurodollar deposit rates. Only with time did some (but not all) come to realize that the Board's data were based on *indicative* quotes provided by ICAP around 9:30am ET, and were meant to "reflect the upper end of an indicative run of rates" paid by prime banks. Moreover, while Reuters posts Eurodollar quotes, brokers and banks report that many institutions are paying up considerably from their posted bids, especially if they're looking to transact in large size, so it is unclear what inference to draw from any discrepancy between these rates and LIBOR.

What changes designed to enhance LIBOR's credibility have been proposed by market participants?

A variety of changes aimed at enhancing LIBOR's credibility has been proposed by market participants, and seem to be under consideration by the BBA. These proposed changes include, but are not limited to:

- Changing the definition of the quoted rate, so that it is no longer references the banks' own borrowing costs. For example, Euribor asks its panel banks for the rate at which one "prime bank" could obtain funds from another. Interestingly, this was the definition used by LIBOR until 1998.
- Making some or all of the individual quotes anonymous, so that even if the quotes refer to own-borrowing rates, banks at the high-end of the rate spectrum won't fear reporting accurately.
- Specifying transaction size, which could adjust flexibly to market conditions.
- Reducing the number of maturities quoted. The high number of maturities may lead to formulaic responses, and it is not clear that the market highly values, for example, a 7-month LIBOR quote. A key issue here may be the existence of derivatives contracts that reference all existing maturities.
- Increasing the size of the panel and including more US institutions, so that the resulting rate is more representative of the global demand for unsecured interbank dollar funding, and less susceptible to issues concentrated within any particular region's banking sector.
- Changing the time of the fixing, or adding a second fixing that occurs when US-based sources of dollar funding are active.
- Implementing an audit process designed to ensure that reporting procedures and quotes adhere to an agreed and published set of best practices.
- Using a different measure of central tendency to calculate the LIBOR fixings from the individual quotes - e.g., the median instead of trimmed mean - with the goal of further reducing incentives to misreport in order to manipulate the level of the fixing.

### What is the BBA doing to address these concerns?

Shortly after the WSJ's April 16 article, the BBA announced that it would "strictly enforce the rules by which banks are supposed to provide accurate LIBOR quotes", and announced that it would expedite a planned annual review of the panel. Thereafter, according to the BBA, their executives met with a variety of market participants – including banks, derivatives exchanges, hedge funds, journalists, and academics – to discuss LIBOR's shortcomings and potential remedies.

This week, the BBA announced that they have scheduled their annual review for May 30. While the annual review typically considers only the composition of the LIBOR panels, the BBA has indicated that a broader set of issues, including the definition of the quote, size of the panel, time of the fix, and calculation of LIBOR from the individual quotes will be considered at this year's meeting. The BBA has circulated a paper examining the pros and cons of various options to members of its Foreign Exchange and Money Market Committee, which is the key decision-making body, and these options will be discussed on May 30.

It is our current understanding that on May 31 the BBA will announce any changes to the composition of the panel, and provide an indication of their intentions regarding more sweeping changes. It seems likely that this would be followed by a process which allows for public comment on any proposed changes.

### What is the "New York Funding Rate" (NYFR)?

In response to recent concerns regarding LIBOR, on May 1 the money market broker ICAP announced plans to launch the "New York Funding Rate" (NYFR).

According to details released on ICAP's website, NYFR is not intended "to replace the more transparent, established LIBOR fixings as a contractual reference rate," but instead to "provide a more useful adjunct to LIBOR than the indicative rates on which the Fed currently bases its H.15 series." After indicating that NYFR may launch as early as May 7, ICAP announced this week that there is no concrete timetable for the launch, as it continues to have discussions with individual banks that may contribute rates.

In terms of definition and construction, important differences between LIBOR and the proposed NYFR include:

- NYFR intends to survey a larger panel, consisting of 35-50 contributing banks (and possible other sources of unsecured funds), all in the US.
- Contributors will be asked to estimate a rate at which a representative A1/P1 bank would be likely to obtain funding, rather than the rate at which they themselves could borrow. Further, NYFR is intended to reflect the broader wholesale market for unsecured bank funding, and so will cover a wider set of instruments and source of funds than LIBOR.
- NYFR rates will be collected at 9:30am ET, vs. 6:00am ET (11:00am London) for LIBOR.
- Tenors will only include 1-month and 3 –month.
- Individual quotes will be anonymous, and the set of contributors to the panel will not be disclosed.
- The number of contributors may vary from day to day; fixings will require a minimum of 24 participants each day.
- Similar to LIBOR, NYFR will be a trimmed mean of the panel quotes - the six highest and six lowest rates in each of the two tenors will be discarded, and NYFR will be calculated as the arithmetic average of the remaining rates.

Partly in response to the announcement of this new measure, as described above, the BBA announced its intention to expedite its annual review, and commented that "commercial providers trying to emulate the BBA LIBOR fixing process for any region would need similar support and commitment from the markets and would have to meet BBA LIBOR's standards for transparency if it seeks to win the market's confidence." Based on conversations with market participants, interest in NYFR seems to have waned considerably since it was first announced. .

**LIBOR recommendations**

Timothy Geithner to: mervyn.king  
Sent by: Marlene Williams  
Cc: Paul.Tucker  
Bcc: Michael Silva

06/01/2008 05:00 PM

Please see message below which was sent last Tuesday, but you might not have received. Sorry for any inconvenience this delay might have caused.

\*\*\*\*\*

Mervyn:

We spoke briefly in Basel about the BBA's LIBOR regime, and you said you would welcome some suggestions.

I have attached a list of recommendations prepared by my staff. We would welcome a chance to discuss these and would be grateful if you would give us some sense of what changes are possible.

With best wishes.

Tim



LIBOR Recommendations\_052708.pdf

**Recommendations for Enhancing the Credibility of LIBOR**  
**FRBNY Markets and Research and Statistics Groups**

**1. Strengthen governance and establish a credible reporting procedure**

To improve the integrity and transparency of the rate-setting process, we recommend the BBA work with LIBOR panel banks to establish and publish best practices for calculating and reporting rates, including procedures designed to prevent accidental or deliberate misreporting. The BBA could require that a reporting bank's internal and external auditors confirm adherence to these best practices and attest to the accuracy of banks' LIBOR rates.

To further enhance perceptions of the BBA as an objective intermediary in the rate-setting process, we recommend greater transparency with respect to the financial relationships between the BBA and the panel banks, and around the BBA's financial interests in LIBOR.

**2. Increase the size and broaden the composition of the USD panel**

The BBA should increase both the size and the proportion of US banks on the USD panel. Currently, the only US banks on the panel are Bank of America, Citibank, and JPMorgan, but there are several other US banks active in this market and potentially eligible for inclusion in the panel, including Wachovia, State Street, Northern Trust, and BoNY. Subject to maintaining the panel's credit quality, the inclusion of more active US banks would produce a fixing that is more representative of the London interbank market and less susceptible to the specific funding issues of institutions that do not have a broad USD funding base.

**3. Add a second USD LIBOR fixing for the U.S. market**

The BBA should consider adding a second USD fixing to capture rates for transactions that occur when the US market is active. LIBOR rates for all ten currencies are currently published at 11am GMT, and this common timing is important to many participants in the FX swaps and other financial markets. However, the fixings occur prior to the opening of the New York market, and prevailing rates can change considerably once US-based sources of dollar liquidity arrive. A second fixing, during the New York trading session, would provide an additional benchmark rate more indicative of conditions during those hours of market activity.

For this second fixing, we recommend polling all the banks that participate in the 11am GMT panel, as well as any additional banks necessary to get an accurate representation of the USD funding market during the New York session. The BBA might emphasize that the introduction of a second fixing is being undertaken in tandem with efforts to enhance the credibility of the first fixing, and thus the second is intended to complement rather than replace the first.

#### **4. Specify transaction size**

Banks currently quote the rate at which they could borrow in “reasonable market size.” To eliminate some of the ambiguity that comes with this definition, we recommend that the BBA provide more specific guidance as to the size of the transaction being referenced in the reported quoted rates. In addition, to reflect the fact that actual transaction sizes can fluctuate markedly with changes in market conditions, the BBA should consider allowing the transaction size it specifies to adjust flexibly over time, with these adjustments occurring either at a regular frequency or in response to significant changes in market conditions.

#### **5. Only report the LIBOR maturities for which there is a net benefit**

We recommend that, in consultation with panel banks, the BBA adopt guidance on consistent methods for determining quotes across the range of maturities of LIBOR. In addition, we recommend that the BBA consider reducing the number of maturities for which it solicits quotes and publishes rates. For tenors such as the 3-month tenor, LIBOR quotes provide valuable information to the public because of the volume of activity occurring at that tenor, while quotes for tenors at which little or no trading occurs, such as the 11-month, are less indicative and therefore less valuable. The current practice of soliciting rate quotes across 15 tenors, when only a subset of those tenors reflect meaningful market activity, likely leads to more subjective and formulaic responses across all tenors. By asking banks to quote fewer rates, the BBA may solicit higher quality responses for those more informative tenors, with relatively little value lost by excluding less informative tenors.

#### **6. Eliminate incentive to misreport**

If the combination of best practices and audit recommendations in (1) above seems unlikely to be sufficiently effective in ensuring accurate reporting, a complimentary approach might be to adopt the following process for collecting, calculating, and publishing LIBOR rates. The BBA could collect quotes from all members of the expanded panel, and then randomly select a subset of 16 banks from which the trimmed mean would be calculated. The names and quotes for the 8 banks whose rates are averaged to calculate the LIBOR fixing would be published. The banks’ whose reports fall above or below the midrange would not be publicly identified, nor would the level of their outlying rates. This random sampling from an expanded panel would lessen the likelihood that the market would draw a negative inference regarding a particular bank’s continued absence from the list of published quotes.<sup>1</sup>

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<sup>1</sup> One potential drawback of this process is that it may introduce, or be expected to introduce, additional volatility into the LIBOR fixings. However, simulations based on historical LIBOR quotes suggest that a process of this sort would not dramatically affect the volatility or level of the fixing. We find that rates computed using this random process differ from the actual LIBOR fixings by, on average, by less than 0.2 basis points in the 3-month tenor.

**Fw: Message for Mr Geithner from Governor King**

Timothy Geithner to: michael.silva  
Sent by: Michael Silva

06/03/2008 09:21 AM

----- Forwarded by Michael Silva/NY/FRS on 06/03/2008 09:20 AM -----



"Ellis, Alexandra"  
<Alexandra.Ellis@bankofengl  
and.co.uk>  
06/03/2008 08:18 AM

To : "timothy.geithner@ny.frb.org"  
<timothy.geithner@ny.frb.org>  
cc : "Helga.Porada@ny.frb.org" <Helga.Porada@ny.frb.org>  
Subject : Message for Mr Geithner from Governor King

Mr Geithner,

Thank you for your email of 1 June concerning the BBA's Libor regime. The recommendations proposed by the New York Fed seem sensible to us. I have asked Paul Tucker to talk to Bill Dudley. We will ask the BBA to include in their consultation document the ideas contained in your note. I shall be happy to discuss this further with you.

With all best wishes.

Mervyn

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# Market Concerns Regarding LIBOR

*Samuel Cheun*

*Matt Raskin*

*INTERAGENCY FINANCIAL MARKETS GROUP MEETING*

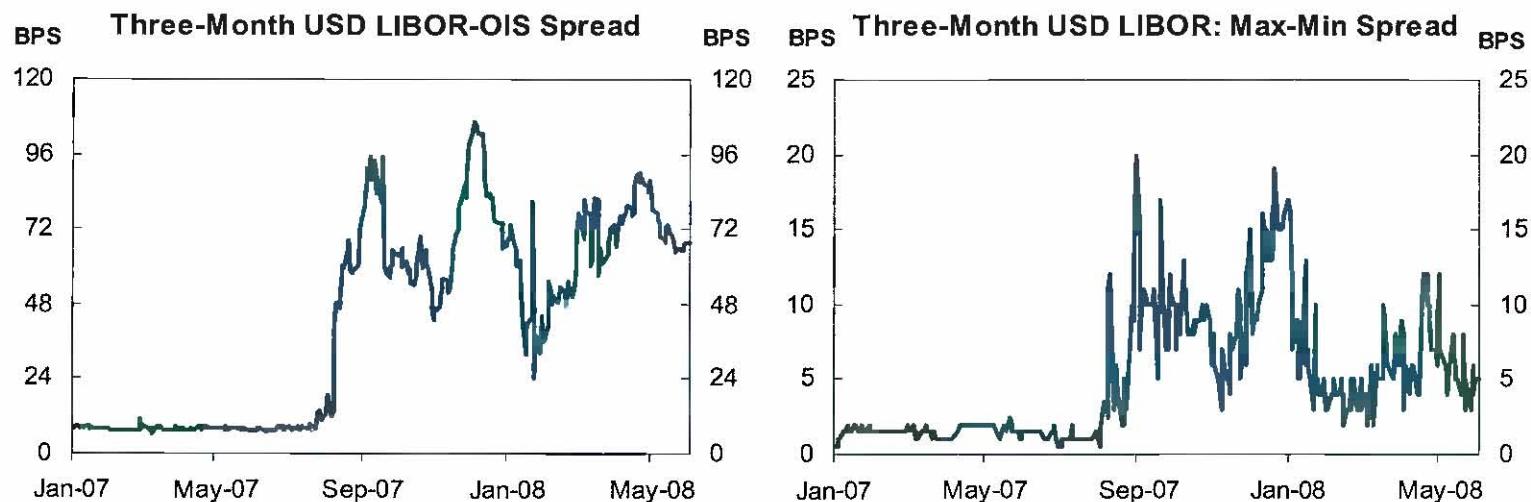
*June 5, 2008*

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## Elevated LIBOR-OIS Spreads Since Aug 2007

Heightened counterparty credit risk and liquidity risk since Aug 2007:

- LIBOR-OIS spreads widened across maturities (dollar, sterling, and euro)
- Extensive credit tiering and name-specific lending



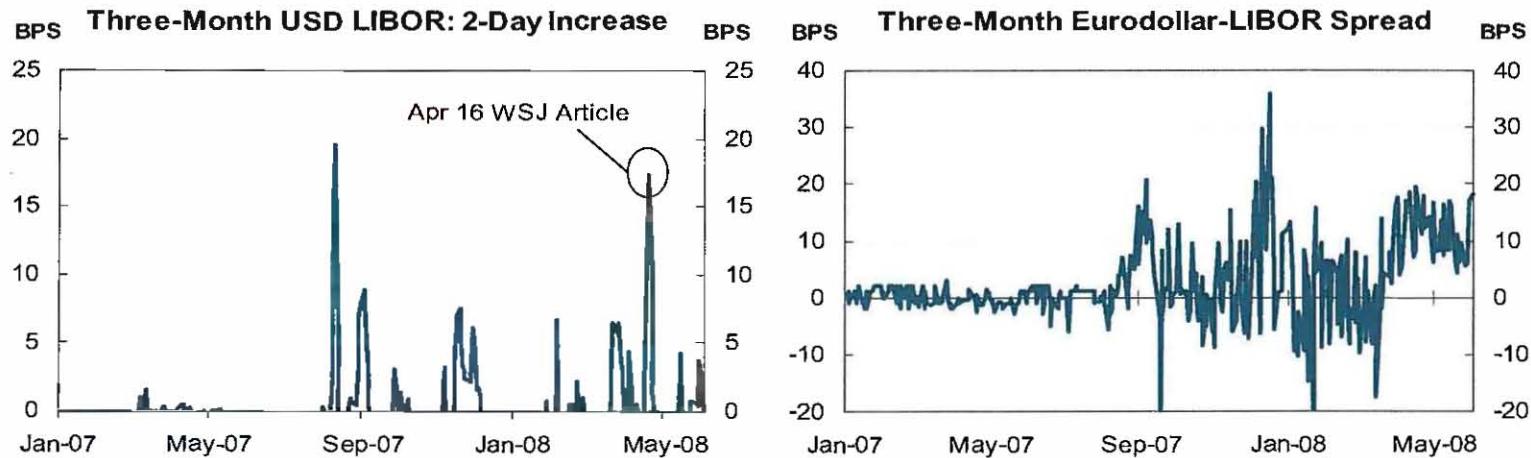
# Potential USD LIBOR Misreporting

Allegations of misreporting, designed to avoid stigma, picked up in mid-April:

- Comparisons to Eurodollar deposit rates, FX basis swaps, CDS spreads
- Broker claims that panel banks were bidding above LIBOR quotes

These claims are difficult to evaluate:

- Credit tiering, intraday variation, “reasonable market size”, little trading activity
- However, large re-pricing in 3-month LIBOR following WSJ article on April 16



## Suggestions to Enhance LIBOR's Credibility

Market participants point to several problematic features of LIBOR:

- Quoted rates are self-referencing and published
- US sources of liquidity are not in the market at 11am GMT
- USD LIBOR panel is heavily orientated towards European institutions
- Ambiguity in quote size and limited trading activity leads to subjectivity
- Insufficient governance and policing of quotes by the BBA

A number of potential changes have been suggested:

- Make quotes anonymous, or change the definition of the quoted rate
- Changing the time of the fixing, or add a second fixing during the NY session
- Increase the size of the panel and/or include more US banks
- Specify transaction size and/or reduce the number of maturities quoted
- Agree and publish best-practices, and enhance governance of the process

## The BBA's and Financial Market's Reaction

The BBA announced results of its annual review on May 30:

- No changes made to the composition of any LIBOR panels
- Recent developments in LIBOR discussed at the meeting
- Details of an enhanced policing mechanism to be provided “in due course”

Broker ICAP proposed New York Funding Rate (NYFR) on May 2:

- NYFR expected to “provide more useful adjunct to LIBOR” rather than “to replace the more transparent, established LIBOR”
- No additional news regarding NYFR since May 14 when ICAP announced that it has no “concrete timetable” for its release

Market impact on trading and hedging activity:

- Limiting exposure to LIBOR – fed funds futures vs. Eurodollar futures
- Complications in pricing and netting swaps contracts
- Possible increase in indexing to alternatives going forward – e.g., OIS

# Appendix

## Appendix: Overview of BBA LIBOR

LIBOR is a survey-based measure of representative interbank deposit rates in the London market at 11am GMT:

- Banks report rate at which “could borrow funds, were (they) to do so by asking for and accepting inter-bank offers in reasonable market size just prior to 11am.”
- Quotes in 15 maturities, from overnight to 1-year, and across 10 currencies
- LIBOR “fix” is the interquartile mean in each tenor and currency
- All individual quotes – names and rates – are published, even those not within the middle 50 percent
- Membership of each LIBOR panel is reviewed annually by a group of 13 active market practitioners – the “FX & MM Committee”

## Appendix: Why LIBOR Matters

Gauge conditions in wholesale unsecured bank funding markets:

- Spread to overnight index swaps (which measure policy expectations)

Referenced by a broad spectrum and enormous volume of contracts:

- Interest rate swaps/futures, consumer mortgages, corporate loans, etc.
- E.g., \$100 trillion (notional) interest rate swaps reference USD LIBOR

Used to price many assets, even if not contractually linked

## Appendix: USD LIBOR Panel Members

- US: Bank of America, Citibank, JP Morgan
- Japanese: Bank of Tokyo – Mitsubishi UFJ, Norinchukin
- European: Barclays, Credit Suisse, Deutsche Bank, HBOS, HSBC, Lloyds, Rabobank, RBS, UBS, West LB
- Canadian: RBC

## Appendix: ICAP's NYFR

According to ICAP, NYFR will be constructed in the following manner:

- Respondents will be asked to estimate the rate at which a representative A1/P1 bank would be likely to obtain unsecured funds, rather than the rates at which they themselves could borrow (note: not just interbank)
- Rates will be collected at 9:30am ET, for the 1-month and 3-month tenors; rates will be published around 10am ET
- The number of contributors will vary from day to day, and will be at least 24 and perhaps as high as 40
- NYFR will be calculated as the trimmed mean of all responses, with the 6 top and bottom responses dropped
- Individual rates and names of individual contributors will not be published

---

**From:**   
**Sent:** 08/28/2007 11:27:54  
**To:** Pat Leising at WORLD BANK; Fabiola Ravazzolo at FED NY;  
Oakhill;

Cybele Suarez; daniel koerhuis;

Pamel

M. Na;

**Subject:** USD libors

Today's USD libors have come out and they look too low to me. Lloyds for instance has printed 5.48% for 3 months. Probably the lowest rate you could attract liquidity in threes would be 5.55% and I am not too sure how much you would get at that level. For that reason I went 5.58%, perhaps a bit high but realistic. Again, 1 month libor came in at 5.5075%. Best offer in the market at the moment is 5.53% and that is not in a huge amount. Again, I was probably a tad cautious at 5.55% but, again, I think I have been realistic.

It is true to say that, if a lender has room for your name, you can achieve very attractive funding levels at a rate well below libor. It would however be imprudent to assume that it is always going to be the case that investors have credit open for your name, especially in view of the general reluctance to place money longer than one month

Draw your own conclusions about why people are going for unrealistically low libors

-----Original Message-----

**From:**   
**Sent:** 28 August 2007 08:01  
**To:** Pat Leising at WORLD BANK; Fabiola Ravazzolo at FED NY;  
Oakhill;

Cybele Suarez; daniel koerhuis;

Pamel M. Na;

**Subject:** Money Market liquidity commentary

Tuesday 28th

UNSECURED	GC REPO
<b>O/N</b>	
USD 5.37/33	5.125/5.00 (treasuries)
EUR 3.80/70	3.75/70
GBP 5.90/80	5.83/79

<b>1WK</b>	
USD 5.45/40	5.15/4.95 (treasuries)
EUR 4.12/06	3.96/92
GBP 6.05/5.95	5.81/77

<b>1MTH</b>	
USD 5.52/48	5.05/4.70 (treasuries)
EUR 4.42/37	4.03/3.99
GBP 6.45/35	5.83/79

**3MTH FIXING** (opening estimate)  
USD 5.52 (Friday 5.50563)  
EUR 4.715 (Monday 4.728)  
GBP 6.60 (Friday 6.6125 )

**6MTH FIXING** (opening estimate)  
USD 5.43 (Friday 5.41125)  
EUR 4.725 (Monday 4.745)  
GBP 6.55 (Friday 6.56)

Increasingly we are seeing a wider range of Libor/Euribor reference rates from the contributor panel of banks, in Europe yesterday the range of 3mth Euribor contributions was 4.62 to 4.75.

USD: O/N rates feel firmer today, general lack of liquidity 1month and out.

EUR: Eonia fixed @ 3.82 yesterday as surplus reserve balances gradually come out into the Money Markets. The ECB will drain some of this excess liquidity at todays weekly Main Refinancing Operation which settles on Wednesday, our estimate is for an allotment amount of around 219 bio which would be 25 bio over the benchmark and down from 46 bio over at last weeks MRO, this should still keep day/day rates relatively low. The market remains illiquid in maturities of 1month and over.

---

**From:** [redacted]  
**Sent:** Monday, September 03, 2007 5:04 AM  
**To:** [redacted]  
**Subject:** Fw: Money Market liquidity commentary

'Ello

Any chchchanges from these USD levels?

----- Original Message -----

**From:** [redacted]  
**To:** Pat Leising at WORLD BANK <Pleising@worldbank.org>; Fabiola Ravazzolo at FED NY <Fabiola.Ravazzolo@ny.frb.org>; Oakhill <mstefanski@ohpp.com>;

Cybele Suarez <csuarez@worldbank.org>; daniel koerhuis <agentsch@bloomberg.net>;

Pamel M. Na <Cna@worldbank.org>;

**Sent:** Mon Sep 03 03:00:52 2007  
**Subject:** Money Market liquidity commentary

Monday 3rd

	UNSECURED	GC REPO
O/N		
USD	Bank Holiday (TN 5.80/5.65)	5.15/4.95 (treasuries)
EUR	4.12/4.07	4.25/4.13
GBP	6.20/6.00	6.15/6.05

1WK		
USD	5.80/5.65	5.05/4.65 (treasuries)

EUR	4.20/4.14	4.05/4.04
GBP	6.20/6.10	6.00/5.90
<b>1MTH</b>		
USD	5.90/5.95	5.05/4.60 (treasuries)
EUR	4.45/4.40	4.10/4.05
GBP	6.65/6.55	5.95/5.89

**3MTH FIXING (opening estimate)**  
 USD 5.70 (5.62125 yesterday )  
 EUR 4.74 (4.735)  
 GBP 6.75 (6.6925 )

**6MTH FIXING (opening estimate)**  
 USD 5.68 (5.535 yesterday )  
 EUR 4.765 (4.764)  
 GBP 6.70 (6.63375)

Friday was again all about getting USD funding, turnover in all unsecured cash markets was almost negligible 1mth and out.

USD: O/N money continues to trade at different levels depending on the time zone, trading up in the far east, even higher when Europe and London start and then lower when NY opens and even lower when London has closed. Libors continue to set too low. Via EUR - USD is currently bid 1mth 6.04, 2mths 5.98, 3mths 5.95 by a prime name.

EUR: Eonia fixed on Friday @ 4.29 . The current reserve period ends on 11th Sept and tomorrows weekly refinancing operation is the final scheduled liquidity tender in this reserve period, the 1week Eonia swap is around 3.98 whilst unsecured cash has traded at 4.15, interesting dilemma between an expected surplus of liquidity and inherent demand for cash.

GBP: Very poor liquidity conditions in all periods, even day to day cash was noticeably less liquid and SONIA fixed @ 6.12 on Friday.

---

**From:**   
**Sent:** 09/26/2007 06:52:26  
**To:**  
**Subject:** FW: Money Markets - rates & commentary

-----Original Message-----

From:  
Sent: 26 September 2007 07:50  
To: Pat Leising at WORLD BANK; ECB front office; Fabiola Ravazzolo at FED NY; Oakhill;

Cybele Suarez; daniel koerhuis;

Pamel M. Na;

Subject: Money Markets - rates & commentary

Wednesday 26th

**UNSECURED**

**SECURED**

**O/N**

USD 4.85/75	4.73/4.58 (treasuries)
EUR 4.31/27	4.34/27 (GC)
GBP 5.65/55	5.60/55 (GC)

**1WK**

USD 5.15/05	4.40/4.20 (treasuries)
EUR 4.35/30	4.17/10 (GC)
GBP 5.85/75	5.72/67 (GC)

**1MTH**

USD 5.18/08	4.60/4.40 (treasuries)
EUR 4.41/38	4.10/05 (GC)
GBP 6.20/10	5.80/75 (GC)

**3MTH FIXING** (opening estimate)

USD 5.21 (5.20 yesterday)

EUR 4.73 (4.725)

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BCI-INT0002757

GBP 6.34 (6.34375)

**6MTH FIXING** (opening estimate)

USD 5.16 (5.14125 yesterday)  
EUR 4.7525 (4.746)  
GBP 6.32 (6.3225)

USD: Same old boring story. Day to day money is trading very cheap, the quarter end turn is looking relatively well bid at 5.20-5.10. There is liquidity in one to six months but our feeling is that libors are again becoming rather unrealistic and do not reflect the true cost of borrowing. Turn of the year looks as if it will come in pretty expensive at 7-6 on the wide, with a tendency I would think to trade higher

EUR:

Yesterday O/N money continued to edge higher despite the ECB having added an extra 33 bio at the weekly refinancing operation and Eonia fixed at 4.218 from 4.109 Monday and around 4% last week, this morning it has already been trading at 4.30, quarter end is weighing heavily on the market and we are seeing very little turnover in term periods. This morning at 10:20 London time we will see the results of the ECB's regular Long Term Refinancing Operation (LTRO). The intended amount is EUR 50 bio, period is 84 days until 20th Dec, the estimates for the average and marginal rates range from 4.65 to 4.35, our own estimate is for an average rate of 4.60 with the marginal rate at 4.45.

A development we have noticed in the GC repo market is that holders of bonds are becoming more aggressive in selling their assets in the O/N repo market, consequently there have been occasions when GC has been trading higher than unsecured cash.

GBP:

O/N money remains very soft and traded at 5.50 yesterday afternoon, this has impacted on all the shortend cash periods with the 1week fixing coming in lower despite the quarter end turn. Later this morning we should get the results of the BOEs supplementary Long Term Refinancing Operation, results should be out at 12:30 London time, attention will be on how many bidders, how much cash they bid for and at what spread to the standing facility.

**From:** Wednesday, October 03, 2007 7:34 AM  
**Sent:** Jason.Miu@ny.frb.org  
**To:** FW: Money Markets - rates & commentary  
**Subject:**

Hi Jason,

No problem, here is todays commentary and I have now added you to my distibution list.

Regards

Wednesday 3rd October

	UNSECURED	SECURED
O/N		
(treasuries)	USD 4.95/85	4.75/4.60
	EUR 3.95/85	3.90/80 (GC)
	GBP 5/80/70	5.74/70 (GC)
1WK		
(treasuries)	USD 5.05/4.95	4.70/4.55
4.03/3.97(GC)	EUR 4.15/08	
	GBP 5.85/75	5.74/70(GC)
1MTH		
(treasuries)	USD 5.15/05	4.60/4.40
(GC)	EUR 4.37/33	4.05/4.00
(GC)	GBP 6.10/6.00	5.73/69
3MTH FIXING (opening estimate)		
	USD 5.25 (5.24 yesterday)	
	EUR 4.795 (4.795)	
	GBP 6.26 (6.25875)	
6MTH FIXING (opening estimate)		
	USD 5.17 (5.1625yesterday)	
	EUR 4.755 (4.753)	
	GBP 6.25 (6.255)	

At the start of the new quarter we have seen a pick up in turnover volume, especially when we contrast that with the very poor market conditions leading up to the September month end last week. In most



---

**From:** Thursday, November 29, 2007 5:00 AM  
**Sent:** Pleising@worldbank.org; front\_office@ecb.int; Fabiola.Ravazzolo@ny.frb.org;  
**To:** mstefanski@ohpp.com;

csuarez@worldbank.org; agentsch@bloomberg.net;

Cna@worldbank.org;

**Subject:** Money market update

The Bank of England has now joined the Fed and ECB in announcing measures aimed at alleviating tensions in the money markets about funding, particularly over the year end.

The BOE will hold a 5 week refinancing operation on 6th December, the dates will exactly match the next reserves period, at that tender they will offer £10 bio at the bank rate

(currently 5.75). They have concluded the announcement by stating they are ready to take further measures to keep overnight rates in line with the Bank Rate. A now familiar statement from the ECB & Fed as well.

If we look at O/N rates the central banks are successful in that objective, today we are seeing O/N GBP @ 5.82/78, USD @ 4.68/63 and EUR @ 3.97/93, which are all relatively close to respective policy rates. A totally different picture in term maturities though, demand for funding and a hoarding of liquidity is still combining to drive Libors higher, another factor we are seeing recently is a more realistic approach in setting Libors by contributing banks, that has been particularly noticeable in USD & EUR this week where the little business that does occur has usually been above where official Libors have set.

With year end coming into today's 1 month USD & EUR fixings we are looking for EUR to fix @ 4.79 (although the real cash offer is 4.81) and USD @ 5.25 although there is no real offer in the market, one large London broker suggests 5.60 and it would be bid 5.70 through the FX arbitrage out of EUR.

Unofficial Transcript

**ID28532636**

**Date: December 17, 2007**

**Time: 12:04:05 PM EST**

**Call Participants:** and Peggy, last name unknown  
(“P”) (New York Federal Reserve)

: Hello, Barclays.

P: ?

: Hi.

P: Hi, it's Peggy from the New York Fed. How are you?

: Good. How's it going Peggy?

P: Good, good just wanted a little bit of color on, uh, what you're seeing in term, funding.

: Well, it's, it's not getting any worse it-it's s-still the levels are still ah, way above where they should be so, in that sense the, uh, while I would think this deposit auction would help

P: Oh.

: U-unfortunately, since it's one month it doesn't help for term liquidity, um, but I guess the fact that things aren't getting worse uh, uh, that's a positive.

P: Yeah, I sh- I heard that volume you're seeing, you know, since this announcement last week that you've actually seen more volume.

: A little bit it has picked up a little bit not, not

P: Oh.

: Dramatically though. It's still not to the level where, maybe in the past when you'd show a level, where you'd get five billion before this thing you'd maybe would have gotten four, five, six, now maybe you might get...*[Offline conversation]*

[ and Offline Unknown Person ]

: Explosion in Manhattan?

P: What?

*[Offline conversation]*

: Thank you.

: Um, some uh, yeah, well it has improved a little bit but um, well, yeah, it is impro- I guess it'd be wrong to not say it is improving, it is improving

P: Right.

: But it's still not anywhere near where, where it should be but um...

P: Right, what are volumes you're seeing about now? You, you...

: They have picked up a little bit.

P: Like a couple hundred million is what like, like what's, you mean, when you do an average trade what are the sizes you're getting now?

: Well, it varies I mean uh, we used to be able to get half a billion, billion trades

P: Yeah.

: Before this thing you we wou- get like fifty hundred million pieces biggest, today we actually got a couple uh, a four hundred and a two hundred million block so that was good

P: Okay, oh, that's good.

: So, in that sense it it is getting more liquid just the rates are still, uh

P: Right.

: Egregious to where they should be but the volumes eh, uh, yeah, volume certainly has picked up no-, but it's still, let me put it this way it's still very poor but it's it's picked up noticeably [laughs]

P: Right.

: But still at a, at a kind of a poor level maybe when everybody sees how these things go.

P: Right, you know what I mean, prior to the FOMC meeting, you know, the spread between to the target and these term fixings, these LIBOR fixings was about seventy five basis points, it's still seventy, seventy five basis points.

: You know, LIBORs being set too low anyway, but uh, yeah, that-that is correct.

P: Yeah.

: So in that sense, it's-it's, but volume has uh, improved a little.

P: Right.

: So I-I will give you that, but uh, it's still nowhere near where it

P: [sighs]

: Where it was but that could change this week, you know.

P: Yeah, so.

: At some point everybody's gonna be done funding over year end in which case, uh hopefully the money will come out, you know.

P: Right, um, have you seen anything trade in the year turn?

: I'm sorry in the what?

P: Just a year turn.

: Somebody, I heard a broker say it was trading at ten percent.

P: Ten percent. Hey well, that's, you know, that's the same level it was trading three weeks ago, so.

: Yeah, so i- but uh we-we don't ta-taking the actually turn doe- isn't really in our interest.

P: Yeah.

: But that's all I've seen today in the turn was ten percent.

P: And talking to investors too that's not desirable for them either, you know, I mean, it's one it's three days, you know rather four days I think but

: Yeah, so.

P: Yeah, so, okay.

: I-I guess what you guys did it-it stopped the bleeding, it is improving but still nowhere near it should be to keep it simple.

P: Oh, I like that quote. I'm gonna quote you on that. [laughter] Stopped the bleeding [laughter].

: [laughter] Well, from getting worse, yeah. [laughter]

P: [laughter] Yeah, that's good, with a Band Aid, yeah, okay.

: Exactly.

P: That's great. Thanks so much for

: But it would

P: Oh, sorry.

: I'm sorry, it would have been preferable obviously, I think you might have heard if this would have been, had a sixty or ninety day, uh

P: Yeah, a longer term, definitely.

: Have you heard that from other people or?

P: Oh yeah, across the board, that's definitely something new. I mean people will always say, you know make it a larger size, but definitely more the longer term has-has been across the board has really been voiced, so.

: Well, hopefully, maybe the next time, you know.

P: Right, well we have Thur-, we got another one coming on Thursday, so.

: Well, not too late to change that maturity.

P: [laughter] Yeah, okay.

: You have a great day, Peggy.

P: Thank you so much take care.

: Bye, bye.

P: Bye, bye.

**From:**   
**Sent:** Thursday, March 27, 2008 3:53 AM  
**To:** 'frank packer'; 'jason miu'; 'johnbonello'; 'Jonathan Hoffman';  
 naohiko baba;  
**Subject:** Money markets - what is happening to O/N USD rates?

On the 18th March the Fed reduced the funds rate by 75bp from 3.00% to 2.25%, but O/N money at least in the Far East and Europe trading sessions is trading much higher than the new target. Yesterday the O/N Libor fixed at 2.9475 and Fed Funds opened at 2.75%.

The pressure started to build a few days before the last rate cut, on Monday 17th March the O/N Libor fixed at 3.8625 from 3.05375 the previous Friday. That was the weekend when Bear Stearns hit the headlines and the Fed cut the discount rate on Sunday by 25bp narrowing the spread to the funds rate to 25bp.

<HELP> for explanation, <MENU> for similar functions.						Index HP
CLOSE/ASK/YIELD						Page 1 / 3
US000/N	LIBOR-USD Fix	Overnight				
Range <b>9/26/07</b> to <b>3/26/08</b>	Period <b>D</b> Daily		HI 5.30375	ON 9/28/07		
			AVE 4.11599			
			LOW 2.64750	ON 3/19/08		
DATE	YIELD	DATE	YIELD	DATE	YIELD	
F 3/26	2.94750	F 3/ 7	3.09375	F 2/15	3.20125	
T 3/25	2.87375	T 3/ 6	3.11563	T 2/14	3.11625	
M 3/24		M 3/ 5	3.15250	M 2/13	3.09000	
F 3/21		F 3/ 4	3.16000	F 2/12	3.08625	
T 3/20	2.74875	T 3/ 3	3.15250	T 2/11	3.06500	
W 3/19 L	2.64750	F 2/29	3.16250	F 2/ 8	3.05500	
T 3/18	3.38125	T 2/28	3.08625	T 2/ 7	3.05500	
M 3/17	3.86250	R 2/27	3.07375	M 2/ 6	3.15625	
F 3/14	3.05375	T 2/26	3.07375	T 2/ 5	3.27750	
T 3/13	3.07500	F 2/25	3.07375	M 2/ 4	3.23750	
M 3/12	3.08125	F 2/22	3.06125	F 2/ 1	3.15125	
T 3/11	3.09750	F 2/21	3.11438	T 1/31	3.16375	
M 3/10	3.09625	F 2/20	3.15125	M 1/30	3.41000	
F 3/ 9		F 2/19	3.16063	T 1/29	3.59500	
T 3/ 8		F 2/18		T 1/28	3.59500	

Australia 61 2 9777 8600 Brazil 5511 3042 4500 Europe 44 30 2330 7500 Germany 49 69 9204 1210 Hong Kong 552 2977 5000  
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2008 Bloomberg Finance L.P.  
 26-Mar-2008 17:52:13

Yesterday was typical of recent trading patterns for O/N. At the start of the day in Tokyo it was trading in a range of 2.80/70, by the time London opened we were up to 2.95/90 and it stayed there through the 11am Libor fixing. Fed Funds opened in NY at 2.75, O/N drifted lower during the afternoon to 2.75/65 and at the London close we were trading at 2.60. It continued to drift lower in NY and closed at 1.00%. This morning we are starting 3.10/3.00.

We have seen this behaviour before and typically it occurs when money market liquidity conditions are most stressed. Confidence in counterparty risk is low and those that have liquidity want to hold on to it. This type of hoarding behaviour leads to a strong bid for liquidity at the start of a day and then a flood of money into the market at the close. That demand for \$ liquidity at the start of the session also spills over into other currencies via the FX swap market, O/N EUR cash is 4.20/15 despite an extra 50 billion cash injection from the ECBs weekly MRO earlier this week.

Liquidity conditions in term maturities remains very poor, there is very little cash to support where Libors are being set and the few lenders in the market are increasingly more name sensitive.

**Unofficial Transcript**

**ID09274211**

**Date:** April 11, 2008  
**Time:** 2:42:40 PM GMT  
**Call Participants:**

(New York Federal Reserve Bank)

and Fabiola Ravazzolo ("FR")

: Barclays.

FR: Hi, this is Fabiola. Is that

: Fabiola, hi.

FR: How are you?

: Good afternoon to you. Yeah, I'm fine.

FR: Good afternoon. [laughter] Finally Friday.

: Yes, thank goodness.

FR: Are you busy busy, or...

: No, I'm not.

FR: Okay, great. I'm happy because usually I mean, all these, yo-you're always busy so I thought

: [chuckle]

FR: [inaudible] Now it's Friday morning and

: No, it's been a

FR: Let's hope I can...

: Quiet, quiet week, actually.

FR: Yeah. How are you anyway?

: Yeah, I'm fine actually. I'm fine

FR: Are you i-...

: And you, is everything well?

FR: Uh I'm okay. I mean, I think I, I just, you know I manage to relax a little bit in the last two weeks because I mean markets have calmed down a little bit so I feel much better.

Me, [laughter] you know we have this intense week over Easter, it was, it was very intense.

: I'm glad you haven't picked up an American accent yet.

FR: No, will never! [laughter]

: [laughter]

FR: I have a, a mix um, a group of friends, so, I have my American friends and I have my European friends.

: Oh right [chuckle] okay.

FR: So, including British, so I'm always uh you know...

: That keeps the balance, right?

FR: Ex-exactly. I try to keep a balance and uh [chuckle]

: Yeah

FR: And then s-still, you know, in um the American English they have a very different, sometimes you have different words.

: Yeah.

FR: So I'm still

: Absolutely.

FR: I'm still stuck on my, on my British words

: [chuckle]

FR: Like apartment, not flat.

: [chuckle] Good.

FR: [laughter]

: Good.

FR: So I'm still not uh, no, no, no, no, I don't want to go on that way.

: [laughter]

FR: I mean, I just I wanted to have an exchange of views of anything new, recent developments, um, and also I have a particular question that I wanted to ask you.

: Yes?

FR: And this is regarding the um BBA, so the British Bank Association, fixing, when they fix the LIBOR for the Dollar, for the Euro, for the Sterling, but, I mean, I knew, I know the panel of the bank is very small, it's sixteen versus for instance the EURIBOR you have the European Banking Federation is forty nine I think?

: Yeah.

FR: But, how reliable is the BBA for instance because you have only sixteen banks? Is it the same framework that the EURIBOR so banks they, they just report the the average rate for what they were lending or is it different?

: You're supposed to publish, um, the rate at which you could borrow money.

FR: Ah, you borrow, not lending?

: No. So you're supposed to, and that's the definition of LIBOR is actually...

FR: But, did it, did it did this change recently, was not lending before?

: Uh, it changed a while back, not, not recently and not, not in response to um

FR: Okay.

: The current financial con-uh-ditions either.

FR: Okay.

: So that there has been a change but it was a while, a while ago.

FR: Was a couple of years ago?

: Yeah, yeah.

FR: Okay.

: But wh-when you actually look, read the actual definitions

FR: Yeah.

: On the screens

FR: Yeah.

: It does actually say that it is where we could um borrow money.

FR: You could

: So where, um...

FR: Borrow, so not necessary where you are borrowing?

: Yeah, because the-the panel is supposed to be, a, um, a panel of prime banks

FR: Yeah.

: And so it's where those banks, um, decide they, they could actually borrow cash in the interbank market.

FR: Mm hmm.

: Now, um, you know, obviously there has been a lot of speculation about LIBORs and, you know

FR: Mm hmm.

: I've read some really interesting articles about them.

FR: Mm hmm.

: Um, and uh, w-, you know we, w-we, we strongly feel it's true to say that

FR: Hmm.

: Dollar, Dollar LIBORs do not reflect where the market is trading which is you know the same as a lot of other people have said.

FR: Mm hmm.

: Um, wha-, it depends on which part of the curve you're looking at.

FR: Mm hmm.

: Um, currently, we would say that in the three months, um, if we as a prime bank had to go in the interbank market and borrow cash, it's probably eight to ten basis points above where LIBOR is fixing.

FR: So you're above ten to fifteen?

: About eight or ten above. If, if, if we had to go in the market and

FR: Yeah.

: Properly borrow money, it would be

FR: Yeah.

: About eight to ten above and in the one year

FR: Okay.

: It would probably be about twenty basis points in the market.

FR: And, and why do you think that there is this, this discrepancy? Is it because banks maybe they are not reporting what they should or is it um...

: Well, let's, let's put it like this and I'm gonna be really frank and honest with you.

FR: No that's why I am asking you [laughter] you know, yeah [inaudible] [laughter]

: You know, you know we, we went through a period where

FR: Hmm.

: We were putting in where we really thought we would be able to borrow cash in the interbank market and it was

FR: Mm hmm.

: Above where everyone else was publishing rates.

FR: Mm hmm.

: And the next thing we knew, there was um, an article in the Financial Times, charting our LIBOR contributions and comparing it with other banks and inferring that this meant that we had a problem raising cash in the interbank market.

FR: Yeah.

: And um, our share price went down.

FR: Yes.

: So it's never supposed to be the prerogative of a, a money market dealer to affect their company share value.

FR: Okay.

: And so we just fit in with the rest of the crowd, if you like.

FR: Okay.

: So, we know that we're not posting um, an honest LIBOR.

FR: Okay.

: And yet and yet we are doing it, because, um, if we didn't do it

FR: Mm hmm.

: It draws, um, unwanted attention on ourselves.

FR: Okay, I got you then.

: And at a time when the market is so um, gossipy, and

FR: Mm hmm.

: Prone to

FR: Mm hmm.

: Speculate about other names

FR: Mm hmm.

: In the market

FR: Mm hmm.

: It's um

FR: Mm hmm.

: Not a useful thing for us as an organization

FR: Mm hmm.

: To do. And in fact, wha-what we've noticed is almost like um, a um, um perverse thing where people that we know that are paying for money actually put in the lowest LIBOR rates.

FR: Okay.

: So it, it's almost to um, you know the ones that need cash the most put in the lowest, lowest rates.

FR: Mm hmm.

: Uh...

FR: And isn't this, uh, now questioning their LIBOR as a benchmark? The role of, its role as a benchmark, because you know

: Currently

FR: If uh, if everybody

: Currently, even though

FR: You know, because probably everybody's

; You know...

FR: Knowing about this so...

: Yeah, well that's the thing you know and I'd, I'd have to say, it-it's definitely not, not, not the case in the EURIBOR fixing

FR: Yes

: And it's not

FR: I wanted to ask you, um.

: Really the case in the LI- in the Euro LIBOR fixing.

FR: Okay.

: And, not really the case even in Sterling.

FR: Okay.

: Um, you know, all of our markets, there's not much cash available in term.

FR: Okay.

: You know, that's, that's for sure.

FR: So it's

: And...

FR: Mainly in the Dollar part anyway?

: Yeah, and, you know, I could kind of say, well, you know, um, yesterday for instance I think

FR: Mm hmm.

: We, we put in

FR: Mm hmm.

: For our EURIBOR, you know, London LIBOR and EURIBOR, we put in something like  
four seventy four or four seventy five, four seventy five

FR: Mm hmm.

: And I think, think we fixed at seventy four and a half

FR: Mm hmm.

: And, on that day we had picked up about five hundred million three month Euros at rates  
from seventy

FR: Mm hmm.

: To sixty five from various

FR: Mm hmm.

: All, all out of French money market funds.

FR: Mm hmm.

: So, we could have maybe said, you know, that our LIBOR was lower because

FR: Um.

: We were borrowing cash there, but, we, we didn't put it in lower because we knew if we  
went into the money market brokers and tried to borrow cash it would be at a higher rate.

FR: Okay.

: So, you know, all-all day long there was like one or two guys trying to lend some money  
at seventy six, seventy five or whatever.

FR: Mm hmm.

: So it was, it-it was a fair reflection seventy four and a half of where

FR: Um.

: You could borrow Euros. But in the Dollar market, people are putting it down below

FR: Mm hmm.

: Where they could actually borrow. Now, you know, it's the same uh thing, some, uh, people might say, well, you know, sss-, this-this bank and this bank called me or this central bank gave me or things like that, but it's not interbank.

FR: Mm hmm.

: You know? And-and it if-if we kept it to a spirit of interbank

FR: Mm hmm.

: Dealers, cut out money market funds, cut out central banks, cut out cor-corporates

FR: Mm hmm.

: And purely based it on the spirit of it, um, interbank dealers, where the money is available, where I would be able to borrow in the interbank market

FR: Mm hmm.

: Without, w-without question it-it would be higher than the rate that I'm actually putting in

FR: Okay.

: For, for Dollars.

FR: I understand.

: Um, not, y-you know, like-like I say, uh, you know it's imp-por-por-portant to say it's not really the same thing in Euros and in Sterling.

FR: Okay, it's only mainly in Dollars.

: In Dollars, yeah.

FR: And because of also this things that is going on and all these crazy issues

: [inaudible]

FR: And it's all part of the Dol-...

: If I wanted to, um, borrow

FR: Mm hmm.

: A lot of

FR: Yeah, Mm hmm.

: Um, three month Dollars

FR: Yeah.

: You know, I need three month

FR: Mm hmm.

: Dollars

FR: Mm hmm.

: Um, it's like, if I start to say that the LIBOR's a lot higher and then people

FR: Mm hmm.

: Start to say, well why is he fixing a lot higher than everyone else? Do-do you know, it's actually going to make it harder for me to borrow that cash?

FR: Yeah. No, no, it's clear, it's clear

: Uhh.

FR: You ma-, it makes sense, uh, now I mean

: So...

FR: You know, I miss a different picture honestly, because I've been mainly focused on the Euro but now on the end of that I completely understand is that you know, I mean, you remember I was in behind EONIA so I remember when we were looking at rate you always question is correct so you just check, uh, so I'm-I'm c-, I'm very suspicious or I'm very curious or, let's say, I find bizarre that who is responsible to com-, to collect this, er, you know, data, they're not questioning banks just to see you know, that the, the level of the rate during the day is very different from

: Yeah.

FR: What i-is fixed.

: I mean, we-we-we've we've all received letters

FR: Mm.

: From the

FR: Yeah.

: British Banking Association

FR: Okay.

: To remind people of their

FR: Yeah.

: Obligation

FR: Yeah, but this is, mm hmm...

: Uh, people, people haven't really...

FR: I understand, I understand

: Um...

FR: You have a business and I completely understand the story, ah, but you know uh, if everybody has got a similar approach so one can also overcome this article on the FT or whatsoever

: Yeah.

FR: It's that you are penalized just because you are honest the way somebody else that is dishonest, eh, you know that's an advantage so that's why I was thinking in that direction but

: Yeah, yeah.

FR: I understand. No, no and I completely understand the, the point is that ah you know, you, you, you always try to, to try and help for everybody you know, and this is so bizarre what is going on in the market

: It is bizarre. Yeah

FR: Because this is creating

: We felt very un-, very

FR: Uncertainties.

: I mean we, it- it's true words to

FR: Um.

: Say we feel very

FR: Yeah.

: Very uncomfortable with it.

FR: I understand now.

: But, the-the position we find ourselves in, is one where we can't really fight it.

FR: I know, I know

: Um.

FR: You have to accept it. I understand

: Yeah.

FR: Despite it's against what you would like to do.

: Yes.

FR: I understand completely

: Yeah.

FR: So that's why, one would like to think how can we avoid the other people do it? You know? Or, or the situation will return and uh, I don't know it's not...

: It's very much a confidence thing still in everything.

FR: Exactly, it's a confidence

: But you-you know, well just gonna say

FR: Hm.

: One, uh, thing

FR: Yeah.

: I-I actually read, read an article from another firm today

FR: Yeah.

: Actually

FR: Yeah.

: Which was actually talking about that it may be understated by twenty to thirty basis points

FR: Yeah.

: But we don't think that that's the case actually,

FR: Okay.

: Fab-Fabiola

FR: It's only ten, fifteen, yeah that's [inaudible] mm hmm.

: We, we, we would say in the three months

FR: Yeah.

: Right now it's about eight, eight to ten basis points.

FR: Eight to ten.

: There, there have been a few times when it's been higher

FR: Yeah.

: But right now

FR: Yeah.

: It would be about eight to ten and in the one year

FR: Mm hmm.

: In the one year it's probably about twenty.

FR: Okay, that is good.

: Alright, but you know different, different

FR: Mm hmm.

: Um, gaps on different part of the curve the further out

FR: Yeah.

: You go, you probably find that there's more of a dislocation

FR: Okay, yeah.

: Between where, where you would be able, I-I mean I would say

FR: Mm hmm.

: Barclays Bank would be definitely in with all the prime banks there

FR: Mm hmm.

: And we're not unusual in any way

FR: Mm hmm.

: If, if, if, if we can't borrow money at that rate

FR: Mm hmm.

: Then, no one else could really, you know

FR: Mm hmm.

: I mean we, you-you know we speak to everyone that everyone else does, so

FR: Mm hmm.

: Um, yeah it's, it's a quite, quite an uncomfortable feeling, and

FR: I understand.

: I don't know if at some stage LIBORs will correct themselves.

FR: I hope so. [laughter]

: If, if we go on for a period of time it might be

FR: Yeah.

: That we, just find that the market wants to actually say, d'you know what, if we all start, start

FR: Mm hmm.

: To say that LIBORs are higher then

FR: Mm hmm.

: We might have that type of thing and that, that would be good because we need it

FR: Mm hmm.

: To be a transparent fixing.

FR: Yeah, and what about the rest of the money market? I mean, I see that the spreads have remained elevated, I mean, so...

: Yeah. You kn-, y-you know just, just when w-we had, um, the announcement of coordinated liquidity measures on, you know, the eleventh of March,

FR: Yeah.

: And we might have been thinking, well we were thinking at that time that when those, um, new actions settle, that we might see some, um, easing back and then

FR: Mm hmm.

: The first month of a new quarter, April

FR: Hm.

: We would generally associate with that. So we were looking forward

FR: Mm hmm.

: To some easing up of conditions in the market. So and then, you know, I think the first big, big thing that happened was Bear-Bear-Bear Stearns.

FR: Yeah.

: In fact, the real big news was Bear, um, Stearns.

FR: Mm hmm.

: And um, I think that that made people further entrench on, um, uh, keeping li- liquidity. And so, money market guys have just turned into liquidity managers and um, we don't trade interest rates with, with cash anymore, you know, definitely not. It's t-, you know, totally a liquidity product and so, it-it doesn't matter what the price of these

things are, it doesn't matter how tempting the yields are in the term markets, our overriding concern is liquidity

FR: Mm hmm.

: And keeping liquid. And um, I think y-you know, we can definitely see that there's lots of cash available around in the overnight. And, y-y-you know, D-Dollars, Dollars is a good, um, indication where the Fed fund effective rate tends to be very close to Fed funds target every day.

FR: Mm hmm.

: But we tend to have quite a range on where it trades actually.

FR: Mm hmm.

: And, not so much today but it's still a fair premium over still about twenty basis points over.

FR: Mm hmm.

: But, we have had times when it's been like seventy five, you know, been trading up at three, um, percent.

FR: Yeah.

: And, um

FR: Mm hmm.

: You know, there were, there were, but, but the Fed funds effective was always close to target.

FR: Mm hmm.

: And, uh, I-I think it just caused, um, a further kind of nervousness about who's gonna be next to go, etcetera, etcetera. And, uh, uh, I have to say, I think if the, the, we-we're all very thankful to the Fed for the actions that they took

FR: Mm hmm.

: Because when we came into work, um, after that, ya know, we could

FR: Yeah.

: Have been fen-, facing a real

FR: Yeah.

: Uh, you know, real severe problem

FR: Yeah.

: I-I mean it's bad, but it could have been a lot, lot worse.

FR: Yeah, mm hmm.

: Um, and y-y-you know, we're, we're at very elevated spreads, um...

FR: Mm hmm.

: Yeah, I-I think it actually shows up in Sterling more than any other market.

FR: Mm hmm.

: Um...

FR: Exactly, is something different going on there?

: Yeah, they, they feel unloved by the Central Bank.

FR: Okay. Is the Central Bank less active in other words?

: Uh, yes, you know that

FR: Mm hmm.

: I-I know that sounds very

FR: Yeah, mm hmm.

: Unfair on

FR: Mm hmm, mm hmm.

: The Bank, Bank of England, but that's, that's the sentiment in the market.

FR: Okay.

: Ya know, I-I don't

FR: Mm hmm.

: Believe that it's anything like as black and white as that

FR: Yeah.

: You know, but, I-I think what, what, what we sense is like some-, say like the ECB is ready to try everything.

FR: Mm hmm.

: The Fed seems to be, um, very pro-proactive, but we sense that the Bank of England wants to know that something will work before it tries it.

FR: Okay.

: You know

FR: That's really clear.

: Yes.

FR: Mm hmm.

: Yeah, that sort of a feeling and so

FR: Mm hmm.

: Um, we, we did hear from the Bank, Bank of England this, this week. You know they, they increased the long term repo from ten to fifteen billion.

FR: Mm hmm.

: Um, five billion extra, I think people were a bit disappointed that it wasn't more. But, but at the same time the Bank did say that they were going to announce, um, more liquidity measures.

FR: Mm hmm.

: Um, so y-you-you know w-we will hear more from the Bank

FR: Mm hmm.

: Um, but...

FR: Yeah, more than usual, but still in-in comparison

: Yeah.

FR: With the Fed or the ECB...

: Well, y-you know so

FR: [cough]

: Just, just, just at a time we might have been expecting spreads to start narrowing

FR: Mm hmm.

: In again, Bear, uh, Stearns I think was a catalyst for, um, um, y-you know entrenching people's more, um, pessimistic views and on the liquidity side of it and things, things have definitely worsened since that day. Um, and, and, now th-the real sort of focus for everyone is the June quarter end, the half year, and, um, that, that seems to be a real sort of barrier in the money markets where, um, you know, lenders of liquidity don't seem to want to cross over that so whether it was Sterling, Dollars or Euros there's not much cash available, um, past the June quarter end. And, on the other side of the same tra-trade is that

FR: Mm hmm.

: There seems to be a lot of demand for cash there.

FR: Mm hmm.

And y-you know you can really notice that in the Sterling market where, um, we had, um, a creep up in three months LIBOR up to six-six percent and then when people think that the Bank of England was ready to cut interest rates, it was pretty much an expected cut. Um, the bidders for cash pull-pull-pulled away for a few days just to see if they would get money cheaper so we saw LIBOR come down to not five ninety two.

FR: Mm hmm.

: Then they cut twenty five and LIBOR is actually five ninety two still, because

FR: Mm hmm.

: Because now the takers of cash are back in the market and so it actually feels like LIBOR wants to go higher.

FR: Mm hmm.

: Um, so, wh-, uh, an even wider LIBOR OIS spread there, and, y-you know the worrying thing is that the June LIBOR OIS spreads are all rather high.

FR: Mm hmm.

: Um, you know up at about, um, eighty six in Sterling and, um, um, seventy five in Europe and I think it's about seventy one in the U.S.

FR: Mm hmm.

: Market.

FR: Mm hmm.

: So, at, that's a high level for some-, you know, for two months forward

FR: Mm hmm.

: Where usually we're a bit more optimistic that things will narrow, so

FR: Mm hmm.

: Now I think that, that reflects, uh, y-you know quite a pessimistic outlook in the markets currently.

FR: Mm hmm, mm hmm. I understand. [sighs] Any suggestion for us?

: Um, you know, I think what we will probably see is y-y-you know

FR: Mm hmm.

: You know, the last

FR: L-looking forward, you know, yeah.

: Well, well the last Dollar um TAF the demand for that

FR: Yeah.

: LIBOR plus ten etcetera so I think people kind of figure that the um Fed will probably provide more liquidity through the Dollar TAFs.

FR: Okay.

: I think, we, looking at the term securities lending facility

FR: Yeah.

: Probably we're thinking it's not as effective as we would've liked, and

FR: Okay.

: We think that the um, underbidding yesterday there

FR: Yeah.

: The under sub-sub-

FR: Yeah.

: Subscription, y-you know, obviously wasn't anything to do with re-relaxed funding but it was more that people didn't have enough of that type of collateral to put into

FR: Okay.

: The operation. You know the Dollar TAF is

FR: Yeah.

: Wider and so that there wasn't enough collateral there. So, um, if there's some way that that can be made a bit more effective and if there's more money av-available at the TAFs that, that in itself will be useful.

FR: So you advice, um, more at the TAF then?

: Yeah, I think

FR: Okay.

: I-I think we could do with seventy five in both actually.

FR: Okay.

: So quite a big jump I know but when you look at

FR: Okay.

: The demand

FR: Mm hmm.

: For them...

FR: Okay.

: You know that would, you know I would rather see that a Dollar TAF

FR: Yeah.

: Um was um pretty near, you know if it was seventy five billion and now only

FR: Yeah.

: Received seventy five or if they received only sixty.

FR: Mm hmm.

Because what-what-what would actually happen then is everyone would start-start to say funding pressures must've eased

FR: Yeah.

: And things would, confidence can come back quite quickly into these markets and so,

FR: I understand.

: But when-when we see that the demand is so high for this it actually

FR: Mm hmm.

: Kind of scares people off the other way around.

FR: Okay.

: So yeah, large-larger size of the Dollar TAFs and if there's something that can be done to um, make the um, term securities lending facility a bit more effective, I think

FR: Mm hmm.

: That, that, th-those two things in themselves will be good.

FR: Like what?

: Ah...

FR: W-w-h-how can we make them...

: Well you see the-the-the tr-trouble is

FR: Mm hmm.

: Fabiola, that

FR: Yeah.

: Really w-w-when, when people are sort of saying we haven't got enough of the type of assets

FR: Yes.

: That we can put into there

FR: Yeah.

: I think what they're really sort of saying is please, please can you sort of widen it even further and

FR: Okay.

: Let us put in some

FR: Okay.

: Of the things that we could put into the Dollar

FR: Yeah.

: TAF.

FR: So wider list of collateral [inaudible] the TAF.

: Yeah, a wider list of collateral but then

FR: Okay.

: I guess there needs to be negotiations about what sort of margin for that, etcetera.

FR: I know,

: Ah...

FR: But uh, you know, for me is al-already important to know about this and um

: Yeah.

FR: You know...

: I think those are the type

FR: Mm hmm.

: Of um

FR: Mm hmm.

: Things you know, and

FR: Mm hmm.

: Y-you know the other um thing that I-I-I think we find a lot of comfort from on the mon-  
money markets

FR: Mm hmm.

: Is seeing overnight rates close to their policy rates.

FR: Okay, stab-more, more stability.

: Yeah. Y-you know...

FR: In other words you are able to price term funds and all these Fed fund rates and all these  
[inaudible]

: Absolutely because then things like the EONIA derivatives market

FR: Yup, mm hmm.

: We don't start to see their bid offer spreads widen out, you know, at least

FR: Yup.

: We see some segments of our market performing well

FR: Yup.

: And then at least off the back of that we can trade LIBOR OIS spreads and things, things  
like that

FR: Yup.

: But imagine if um overnight Euros started to get very dis-

FR: Yup.

: Dis-dislocated then...

FR: Like do you remember September?

: Yeah, then the EONIA

FR: Mm hmm.

: Guys are gonna say we can't trade this, we can't hedge this

FR: Yup.

: Prices get wa-

FR: Yup.

: You y-y-you know so it's, it's im-por-por-portant to anchor the overnight

FR: Yup.

And more, more, more so, so that we kind of know that at least this is one point of the curve where we can k-kind of have an understanding of where rates will trade.

FR: Mm hmm.

: Um you know we can make our own decision about policy rates but at least we know where they will trade you know relative to policy and we can you know square ourselves up every day there as well

FR: Mm hmm.

: And that money is liquid etcetera so, so that, and more U.S. Dollars I, I would say are the are the two things that um, we kind of asked for but, but again I-I'm putting myself in a position where, and I hear this from all the other banks, it seems like us banks are just always asking Central Banks for things, and y-you know I think ultimately y-y-you know banks need to sit-sit down as well

FR: Mm hmm.

: And we need to kind of clear the table with ea- with each other, you know. We need to um make this uh, I know people use all these words like transparency and that they're all very easy to, to say but fundamentally at the bottom of this for instance at Barclays Bank, what is stopping him lending three month Euros to

FR: Yup.

: Uh, BNP Paribas Paris at four seventy, instead of lending him some overnight money at three ninety?

FR: Okay. Mm hmm.

: You know there's eighty basis points there. Um, I, I need to be able to start trading back for interest rate views and compelling interest rate views and yield and carry rather than just on the liquidity side, you know, and I need to sort of start feeling to myself, um, I don't need to be scared of all my interbank counterparties. I don't need to fear that if I lend them some three month money that during those three months they might go broke and not be able to pay me back, you know?

FR: Mm hmm. Mm hmm.

: Um, so I-I kind of need to um, kind of educ-educate myself a little bit you know, I need to get, get my own confidence levels up as well, Fa-Fabiola.

FR: I know, me too. I, ma- you know now I need to go back and study again and thinking about and understand the whole thing, I mean. So far I try to be behind the reprice action and running behind but now that the situation has come down I really need to think about, really

: Yeah

FR: And, and im-improve myself and educate myself as well because there are so many new things and

: I know

FR: I don't know.

: And all these new things about LIBORs. You know

FR: We need to think about how

: [inaudible]

FR: Everything is linked, you know.

: Yeah, I-I'm almost thinking instead of LIBORs we should do LI-LIBIDs.

FR: LIBIDs?

: Yeah.

FR: Okay.

: Not, not call them LIBORs and then people could just say I lend money at whatever spread you want above that, but there'd be like a LIBID reference rate or something you know

FR: Okay.

: Of that sort of nature, well why not call it the bid, bid, bid side of the market instead of the offer?

FR: Yeah, okay.

: And then you know the lending spread is individual to each particular bank.

FR: Yeah. Yeah.

: Um, but y-y-you know also um t-talking to a lot of our sales people here, the ones that speak to hedge, um, funds, it's, it's quite obvious that a lot of the bigger more active sort

of trading derivatives guys in London like Brevin Howard and Blue, uh, Crest that they've been um, um on the bandwagon if you like of looking for higher LIBOR OIS spreads and they're still trading that, that way round of it and they're, they're quite aggressive in the market. So you know, the kind of big traders at a lot of firms are all trading on the negative side of it and, um, you know I have to say, I look at Europe and where our spreads, spreads are now and the June IMM and I've actually been trying to go the other way round to that. Actually trying to sort of, um, you know, trade that spreads are very high, that June is two, two months away, um, that um, I'm more hopeful that you know continued Central Bank liquidity measures and time will y-y-you know bring back some confidence to the market. So, I was actually y-y-you know trying to sort of come to a view to trade the other way round, but that's certainly not typical of, um, market flows. You know, the market wants to trade for wider LIBOR OIS spreads.

FR: Okay. Okay, I think like usual we had an interesting conversation.

: Yeah it's ni- always nice to talk to you anyway Fabiola.

FR: Yeah I always enjoy as well. [laughter] It was very useful and uh, I have a lot of things that I'm looking after so I hope I have a better picture so I call you again maybe next week to discuss

: Okay.

FR: Something more because I really try to understand als- all the links across already from a markets segments, repo market and the different players and where things are different in Europe respect to the U.S., where there can be a problem. I'm going to really try to educate myself and you know be, o-open mind.

: Yeah.

FR: You know?

: No, it's unfortunate [inaudible]

FR: Here it's very important what is going on and we really try to understand e-everything, we just don't focus on the Dollar market we focus on everything to really try to see any behavior that we, we really can get some information, we can, we can really understand more.

: Yeah no it's interesting

FR: Mm hmm.

: If you put all the little bits of the picture together

FR: Yeah.

: You know hopefully it makes some, some

FR: So

: More sense.

FR: I'm here with chance to try to build up things. [laughter]

: Yeah. [laughter]

FR: So maybe I call another time next week when you're quieter

: Yeah sure, sure.

FR: Not on a busy day.

: Fabiola any uh time, okay?

FR: Mm hmm. Okay thanks a lot.

: You have a nice weekend.

FR: Have a great weekend. Bye .

: See ya, bye.

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Unofficial transcript of telephone call on 10 October 2008 between  
and an individual named Mark at the Federal Reserve Bank of New York.  
They were linked up by telephone by an unidentified staff member from the Sales Team  
in NY ("Unknown in Sales Team"). Barclays notes that the following transcript was  
prepared without the aid of a professional court reporter. However, Barclays believes  
that the transcript herein is complete and accurate.

: [Answers telephone]

Unknown in Sales Team: Hey Hold on one sec... Hey are you there sorry?

Mark: Yep

Unknown in Sales Team: Hey I have on the line who's trading the er dollar, front  
end of the curve for us.

Mark: Oh okay, Right, right.

Unknown in Sales Team: are you there mate?

: Yeah, I'm here.

Mark: Hey it's Mark at the New York Fed (NY Fed).

: Yeah, hi.

Mark: I was just wondering if you can provide any colour on what's happening I guess  
with the dollar libor fixings... I mean it looks like the front end of the curve  
people, the overnight tenor declined sharply... um...

: Yeah, that was ahh... we sort of... got a feeling from yesterday's overhang that  
maybe dollars would be cheap today er. There's been a lot of tiering.

Mark: Mm mm.

: Ah, I mean certain names have been paying up for money. We sort of don't really  
need too much money today, we don't think, so we're being fairly unaggressive.  
In fact, someone's just given me some money at 0.2%.

Mark: Mm mm.

: Ah, but I think generally speaking, the market is probably 3%, 2% something like  
that with a few names paying the top. So, so, so the overnight market today is  
working very well. I would say that a couple of days ago it was not working well  
at all err, that's sort of after the RBS downgrade when everyone was scrambling  
for cash. Now they're still looking for cash, but there's not that panic that there

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was a couple of days ago. Um, libor's further out. I think it is just getting to where they should have been a week ago.

Mark: Mm mm.

: I don't know if you've looked at my libors but I've kept mine the same virtually every day for the last week and everyone seems to be gradually sort of coming up to my levels, and I can tell you that I'm putting levels in that I'm not sure I can trade or not, but I know they're more realistic than anyone else's. For instance today, there has been one offer of cash in one month and beyond. That was a 5.5 offer for 50 million one month out of Hong Kong. So, should I be going 5% my one month? I'm not really too sure, but I mean, you've got to go somewhere, haven't you?

Mark: Mmm mm.

: Um... so there is no term cash.

Mark: Right

: Ah, and it's the same story as it's been for the last two weeks. There's no term cash. The money funds don't want to do anything. Certainly with the state of. Every day a different bank goes down or there's different rescue packages, everyone's waiting for G7 you know there's always something this sort of 10% drop in Japanese stock exchange, you know. I mean the FTSE's down nearly 10%, so, you know, there's a sort of feeling the feeling we get is that.

Mark: You don't buy BTs(??) or anything.

: It is now going to start impacting the feelings of the man in the street. I think before that I should say that it was something that was happening in banking.

Mark: Right.

: Now, with stock markets dropping, you know 10%, 10%, this is people's pensions and things. You know we saw the thing with the Iceland, well. The UK banks, well the UK savers in Iceland, that, that crystallises people's thoughts, and so I think that we're sort of reaching a new stage in the game whereby the CPFF is really good but, not sure it goes far enough, it just gets you back to where you were in August.

Mark: Right.

: ... and what we've been seeing certainly here and probably you'll find at most banks is the amounts of unsecured money they're having to raise in the market is going up, not just because they have roll downs of liabilities, but also because the

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amounts of money that they have to lend internally um is going up because of things like increased haircuts, which obviously make the amount of unsecured money you have to borrow more, ahh, tighter collateral requirements, also just former avenues of securing finance sort of not really working all that well, like equity repo...

Mark: Mm mm

: ... and so... [To someone else at the desk - overnight trading at 1.5 coming out of New York, aah here] so overnight's working fine as I said. So, and RBS is still paying 2.5 so he needs money still.

Mark: Right.

: Um... So, I think, getting us back to where we were in August isn't really, is, don't get me wrong, it's incredibly useful, but I'm just wondering whether we need to be got back to August plus a bit. The UK guarantee to banks, again, it's a very, very positive thing but, a bit like the CPFF, no-one really knows the details, it's going to take several weeks to get off the ground, everyone is going to examine the guarantee and it's going to take a bit of time for things to start working there. So, again, that's sort of work-in-progress but that is very good news but... you know, the rumour came out that, you know, G8 were going to guarantee all bank deposits, and, you know that's.

Mark: How realistic do you think that is?

: Well, if you look at the amount of debt, or the amount of interbank lending there is, I mean, one of our guys has said there's something like 80 trillion, so I don't think that's realistic. What I think, and I know central banks don't like doing this, my view is that, everyone's talking about, "You've got to get into bank lending happening again. I don't think that's necessarily the important thing. I think the important thing is to get banks lending to the consumer."

Mark: Mm mm.

: ... to Joe Public so I think the way you do that, is you either do things like increase CPFF or you just um, do something similar, like just buying bank term CDs.

Mark: Mm mm.

: But I know central banks don't like doing that. But it's getting to the stage where everytime you and I think you guys tried to be ahead of the curve in the States, er everytime you throw the kitchen sink at the problem, it needs another sink and then another sink. Then there's euphoria for half a day then something else happens and the market plunges, something else has to happen, the the market plunges. It's almost as if, you know, you've got to me totally radical now.

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Mark: Yeah.

: Ahh, because otherwise I had a fit of pessimism a couple of days ago. I think it was the day after RBS got downgraded when there was mayhem in the market and um I was thinking, you know, this is potential civil strife here because the banking system is just going to break down.

Mark: Mm mm.

: And people are talking. You know the papers and the news and the media over here are calling it, they're already calling it, "The Free Fall Friday".

Mark: Oh right.

: And that's going to hit the headlines, I can tell you, and people are going start worrying. So, I think it is. I can't overestimate the seriousness of the situation. And I'm not talking about it from a personal point of view or from Barclays or it's a systemic problem.

Mark: Right.

: And I'd love to know what you think because we've talked about what has to be done. Obviously, banks have got to replenish their capital.

Mark: Yep.

: But they also, they've got to start lending they've got to get the system going in some kind of way, shape or form.

Mark: Yeah, yeah. I mean, I think that, yeah, I mean certainly the gravity of the situation is, is ah very very, very important and very very serious and I think that everyone... well, there are many people out there that recognise the problem, but you know crafting the appropriate solution is ah as you well know, and have seen is somewhat challenging. I mean, we've tried things on our end and other global central banks have as well, and ah, you know, I can't imagine that those more senior than I will stop trying to do anything anytime soon.

: I believe you.

Mark: You know, I. We're obviously working on it and very concerned about all of this. [ starts to make comment, but Mark from NY Fed asks,] My question to you though is, if I'm just looking at the libors and I see term go up very modestly and overnight decline very sharply, is this something that should be interpreted positively or is this just kind of a one off-type event, or is this having to do with

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all of the liquidity that is getting pumped into the system and finally banks just saying," At least overnight they, they have enough"?

: Yeah, ahh I think you're partially true. I mean, libors, the term libors are going up because they were unrealistic before and I've got to say I look at one-month libor at 4.59, that's unrealistic. You know, any libor, ahh with a four handle on it, from one to three months is wrong in my book.

Mark: Mm mm.

: Um, I mean you know I'll pay anybody 5% for one, two or three months, and you know, worse... and you know Barclays is seeing a "flight to quality" to its name so it's not as if I'm a rubbish name and people don't want to lend me, it's just people haven't got the money to lend. Occasionally they will come out, they'll lend at far higher up. The overnight is the thing that we talk about a lot actually because, you know, because it's the only market, really that anybody can get any liquidity in.

Mark: Mm mm.

: Even getting tom next, spot next, spot a week is difficult. Um, it's very, very, very important to us because I think, we're seeing the banks around the world are relying more and more and more on overnight and I suppose the worry for us is, even if the overnight market is functioning really well, which today it is because it's coming off and people seem to want to lend it. Which is great, you know, three days ago and all they want to do is borrow it.

Mark: And I mean is that just because there is less sort of specific name concern out there?

: I think there's just as much specific name concern as there was before.

Mark: Then I mean, then, then I, I guess I'm still struggling to really understand why today in particular there would be such a sharp decline in overnight rates.

: Well I think ahh well I'm not an expert on the ins and outs of overnight, but it seems to me that there was a pretty large surplus in the system...

Mark: Mm mm.

: ... and it seems that there's an overhang and it seems that people have got money to go. So, you know, for us it's extremely important that overnight trades softly.

Mark: Mm mm.

: Extremely. Extremely imp. Or certainly has a softer bias during the day.

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Mark: Yeah.

: That's the thing is that there's nothing worse than trying to take money when it's being bid up by everybody else. At least when it's coming off you can bid in the middle of the price, you're going to get money. You know, your lender is happy to lend you because he feels he's got a deal and all that kind of thing. But er it, it's, there's definitely a lot of name tiering, um there's a lot of country tiering. I noticed the other day that um when we were having er, big trouble, I was paying 6% for overnight and my New York was getting it at 4%, so I just pulled out of the market.

Mark: Yeah. So there is name and country...

: Yeah, because US-based lenders... you know, in the old days, you know if you were ahh a US borrower and, say Barclays New York and Barclays London, there would probably be say maybe a three-tick differential.

Mark: Mm mm.

: Well, now it's, you know, you name it, you name it.

Mark: 100 basis points.

: Yeah, that's it, so. But I think going back to the overnight its great that it's very, very liquid and everything else, that's really, really important, but but the thing I was going to say was that you know, if banks really do have more and more and more ahh to fund on an unsecured basis in the overnights, there, they will be worried that there will come a time when the global credit limit for their name runs out.

Mark: Mm mm.

: And, you know, I'm sure that banks are doing exactly like what we're doing there. They're finding every single piece of collateral that they can get their hands on and put it into, you know, any TAF or whatever facility that they can. But they will still have money left over unsecured that they've got to borrow.

Mark: Mm mm.

: That, that I think is the problem. I mean, we've been working [clears throat, "Excuse me"] very hard in the last week to, to, you know, get things which are not absolutely necessary to take off the books, you know. "Is that necessary? No, right, you're not doing any..."

Mark: "Get rid of it", right.

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: and I think every bank will be doing the same. I mean, one of the reasons that I'm so calm today is that I know that by mid-next week I'm probably going to have to borrow, probably at least 10 yards of dollars less on the overnight than I did um yesterday. So, I sort of, feel slightly better about things.

Mark: Mm mm. Okay. I will. I really appreciate all your time this morning.

: It's no problem. Ring me when whenever you need to.

Mark: Allright. Thank you.

: Thanks a lot.

Mark: Bye.

: Bye.

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Unofficial transcript of telephone call on 24 October 2008 between [REDACTED] and an individual named Tania from the Federal Reserve Bank of New York. They were linked up by telephone by an unidentified staff member from the Sales Team in NY ("Unknown in Sales Team"). Barclays notes that the following transcript was prepared without the aid of a professional court reporter. However, Barclays believes that the transcript herein is complete and accurate.

: [Answers telephone]

Unknown in Sales Team: Hey mate, hold on one sec. are you on the line?

: Yeah, I'm on line.

Tania from Fed in NY ("Tania"): Hi, I'm Tania. I'm calling from the NY Fed. How're you doing today?

: Yeah. Good thank you.

Tania: I'm seeing if I can get any colour you have on how your dollar is trading, where you expect libor to.

: Well, libor's going to come in at....three-month libor is going to come in at 3.53.

Tania: Okay. Which is....yesterday's er?

: Yesterday's...it's a touch lower than yesterday's but please don't believe it. It's absolute rubbish. I, I, I'm, putting my libor at 4% and I can tell you I've just gone through three money brokers in London, Prebon, ICAP and Tradition. Prebon have no offers at all in the market.

Tania: In one or three months.

: No, in three months, in three months. CAP have no offers. When I said, "Where can I get money if I wanted it?", they said "4.5". Ah, Tradition have got no offers. They did have one offer out of Hong Kong at 4% but he's gone home. So basically.

Tania: Where you seeing offers in one month dollar?

: Offers. There's an offer and 3.5 in Switzerland in the one month.

Tania: In one month?

: Yeah, and I'm just going.

Tania: Has that improved over the....I realise that liquidity's been absent, um, beyond maybe just a couple of weeks in libor, dollar libor um.

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: Yeah, I think.

Tania: Are you seeing people extending further out.....?.....Maybe....A little bit more.

: No, I think the problem is that the market so desperately wants libors down it's actually putting wrong rates in.

Tania: Uh ha.

: Um, now what we did see, a couple of days ago we got given some money by Chase New York. You know that Chase is lending ones and threes. We got given at three and three quarters. He was lending at 4% yesterday, and in a new development, he then came into the market via the brokers.... and asked where Barclays paid for Euros. So, if he had given us Euros for our Euro bid, we could have swapped them into three-month dollars at 4.53.

Tania: Okay.

: So either he's trying to get himself a better rate on the dollar assets or he's just forcing us to go via Euros and pay up for dollars that way. Whatever way...whichever way you cook it.....I mean, I can't blame him for doing it, because he's getting himself an asset far better via Euros than he would via dollars, but that's the skew of the foreign exchange market. But basically what I'm saying is, ah, maybe this market shouldn't be selling libor at 3.5 but at 4.5. Because if money funds aren't coming in, and we did see money funds come in a couple of days ago, and they were buying at 3.75 ah, when libor was fixing at 3.55. Um, but if money funds don't come in..... money funds can't arbitrage so basically they just look for straight dollar bids and, you know, issue levels, and that's fine, but you know for a bank such as Chase that can arbitrage it knows, it knows that it can get paid far more via other currencies. I mean, I can, just to give you a clue I got paid 4.30 in threes by my Tokyo, via the yen.

Tania: You got paid 4.30 for.

: For three-month dollars.

Tania: Three month dollars.

: By my Tokyo.

Tania: Mm mm.

: He's looking for yen. And, and so basically I have to say, dollar libors are incorrect and they're too low.

Tania: Why.

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: Much too low.

Tania: If this is what you're seeing then why are these being set?...I mean I've seen Barclays is on the panel.

: Yeah, I'd love to know. I really would love to know. I mean, I think that.

Tania: Who sets it...I mean, who sends in exactly [dialogue overlaps between Tania and here].

: Well, I, I'd love to know. I mean there are various theories about it. Well one thing is that there is tiering in the market.

Tania: Mm mm.

: So, people like Rabo and Chase will be able to get money cheaper than say Barclays, RBS. I mean, West, Deutsche, Landesbank I don't know where he gets his libor indications from. I can't imagine anyone would want to lend him any money. There have been, recently you've had certain banks who I know have been paying 25 basis points over where they've set their libors...aah just the other day there was one bank who was paying 3.75, he sets his libor at 3.70. Um, it's you know,...why are people doing it? Well, there is tiering so that's one thing. I think people are afraid to be seen as um being ahh having, I mean if they have a high libor the market automatically assumes they're paying too much, but in a perverse kind of way if you put a low libor, it's almost as if the market knows that you're scared to put where you really think it is. I mean, I know that I'm consistently high, but I think I'm consistently correct. Um, and ah.

Tania: Allright, well thank you very much for your time. I appreciate it.

: No problem at all.

Tania: Take care.

: Thanks. Bye.

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Unofficial transcript of telephone call on 27 October 2008 at 12:17 GMT between and an individual named Peggy at the Federal Reserve Bank of New York. They were connected by telephone by an unnamed staff member at Barclays. Barclays notes that the following transcript was prepared without the aid of a professional court reporter. However, Barclays believes that the transcript herein is complete and accurate.

: [Answers telephone]

Barclays staff member: Hey ? Hold on a sec...yep.....Hey ?

: Yeah, hi.

Peggy: Hello?

Barclays staff member: Hello Peggy, this is ahh ..... is on the line.  
He's our dollar deposit trader.

Peggy: That's great. Thank you so much. , hi good morning. This is Peggy from the New York Fed.

: Yeah, hi Peggy.

Peggy: Hi. I'm sorry for bothering you I just want to get a quick update on how dollar funding conditions are.

: Um, well I suppose the name of the game today ahh is emerging markets, ah and everyone is sort of worried about emerging markets and lack of liquidity therein. We're hearing overnight Romanian trading at anything up to 900%...ahh....overnight Mexico's trading up in the hundreds as well, so it's sort of...that's sort of causing a bit of a problem for the dollar market in....well for every market, it's not just the dollar market in that people are just very, very worried about sort of counterparties, liquidity, all the general thing that we were worried about last week. Now the one bright note on the horizon (we don't like to be negative all the time) is the CPFF.

Peggy: Yes. Starting today. Okay.

: So, if people take that up, ahh, we think it's actually pretty attractive funding levels. You know, if you make full use of it, it comes out at about OIS + 220, say....

Peggy: Mm mm.

: ...ahh, you know, so if you're looking at an OIS of sort of around 90 at the moment, well you're getting money in at 310 with a libor at 3.5 and, you know, I've actually just had a run through with the brokers and there are people out here paying anything from 4% to 4.10 for 3 months and in fact just anecdotally a sterling bid at libor, sterling libor equates to a 4.45 bid in dollars at 3s so there's still a lot of pressure on the dollar market now. I

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think the CPFF will not necessarily bring libors down as such because of the weight of offers of cash but just because people will be able to fund themselves in, you know, via this SPV, and so demand for cash should come down. Now hopefully, that will make these lenders of cash few and far between as they are actually lower their prices, but whether they do or not, it's another.....

Peggy: Hhhow, I mean, today, so how are you seeing the availability of dollars out there say compared to Friday?

: Well...

Peggy: Any change?

: Okay, I'll tell you what I've done. Uuum, I have been given a reasonable amount of dollars in one month. Um, three months, I've tried to take a 3.75 offer out of Hong Kong they couldn't do me. As at 11:00 London time there..were..no..offers. Now, I do know that um, according to my brokers, New York centre is asking if anybody's paying up in 2 months at the end of the month, so that's end of December money. They're also asking threes but they're asking a lot but they're not actually trading anything, or, or...

Peggy: Do you know what they're asking? What the level is?

: They're asking where people pay, but they're not actually showing any offers or giving any money away.

Peggy: Can I ask, the one month that you got, is it...um, how much, like... what level did you get that at if you don't mind me asking?

: err, I got it at anywhere between 3.25 and 3.40

Peggy: So a liiittle bit above libor then?

: Yeah, yeah, I mean I put my libor at 40 because I thought that that was a sort of, you know, if I was to go out and ask for money, that would be a reasonable level. But you know I could have probably put that five ticks down and that would have been.....and you know I couldn't have argued against it. Go any lower than that I probably would have argued. I put my 3 month libor at 3.90, really because just, because there is no money out there. The last.....

Peggy: Do you....I mean in terms of the libor settings, I mean, what are your just general thoughts too on them?

: Um, I can see why people are trying to push them down but don't think it's justified in, in...if you actually look at the strict definition of libor er, and ah, and also in view of the fact that money funds really aren't in the market and also I think er I told you before that if New York-based banks are going to come on and lend other currencies to produce

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dollars, you should actually be seeing libors go up like, you know, I think I said, you know that our Euro bid on Friday would have, or on Thursday, would have equated to a dollar bid of 4.5%, so we could have got the money, but it would have been sort of a circuitous route, and in fact it would have had the strange effect of making libors go up because that's the only place where money was available.

Peggy: Alright. I see, Okay.

: So, it's...you know....it's a strange old thing where we've got this huge great forward foreign exchange skew in all periods. But you know, definitely dollars....if you can get dollars they are *definitely* the cheapest forward funding for *any* currency, apart from maybe the Hong Kong dollar.

Peggy: Really? Okay.

: I don't know. Do you have Bloomberg up on your desk?

Peggy: Yes, I do.

: Put up, "FX"....actually, put up "FXIA".

Peggy: [Tap, tap, tap] okay.

: ....and then it will come up with a, like a table.

Peggy: Oh...

: If you put "Swap Period 3", "Go",

Peggy: Three.

: "Go"

Peggy: Okay.

: ...then what you'll see is, that will show you....where it says, "Arb Rate", the second column from the right, that is basically....so you've got the....dollar's at 3.50 / 75 which is libor. It shows you that if you want to get money, at er 3 month Euro, libor, you can afford to pay up to 4.94%.

Peggy: Oooh wow!! Okay. Oh this is great, Thank you!!

: This is a really....this is what we look at all the time and....

Peggy: Okay

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: ....at the beginning of the year when people were saying, "Why are you setting your libors so high?", I was saying, "Well, I know the money funds are in but you can't take away from the fact that other currencies are prepared to pay way over libor to get money in".

Peggy: Right.

: And, um, now that money funds, because money funds can't arbitrage. If they could arbitrage, believe me, libors would be higher.

Peggy: Okay.

: Because they look at all this and say, "Right okay. Well if I go and give 3-month Euros, I'll have myself a dollar asset of 4.94". And so, this is what we look at all the time. So you can see that....

Peggy: That's great. Okay. thank you so much.

: That is a pleasure.

Peggy: Okay, looking forward to speaking again. Thank you.

: Thanks bye.

Peggy: Bye.